THE AMERICAN

School Board Journal

Founded March, 1891, by WILLIAM GEORGE BRUCE

Volume XLVIII, Number 5 | MAY, 1924 | Subscription, $3.00 the Year

Does Experience Teach?

Small Town Essays

On Discipline

Last year they had a good teacher on the Dry Ash bench. She was a splendid woman with a stern eye for discipline. Whenever a child was bad she would lecture him and have him dust the erasers and clean out the chalk troughs as punishment. The trustees liked her work so at the end of the year they promoted her by giving her a room in the town grades.

They have another good teacher out on the Dry Ash bench this year. She, too, likes to maintain good order in the room. She always praises a child who has done exceptionally well, and lets him wash off the blackboards and clean out the chalk troughs.

The trustees say that the children work as hard this year trying to get to clean out the chalk troughs as they worked last year to avoid the same task. The teacher is being considered for a room in the town grades.

On School Trustees

By far the most thankless task in a small community is to act upon the board of school trustees. They have to devote valuable time to the cause of education without a cent of pay. They have to listen to all the petty gossip and to feel all the petty malice which crops out whenever all the people are engaged in a common enterprise. Public spirited men undertake this office at considerable loss and inconvenience to themselves.

Yet there is never a shortage of candidates for the position of school trustee and so long as the schools keep their free character there will not be a shortage of available candidates. I think the reason for that is, while the trusteeship may have no financial inducement, it is, to a very large degree, a badge of merit. The common run of voters exercise nicer judgment in electing a school trustee than any other public officer. Putting a man on the school board is equivalent to saying that he is one of the reliable members of the community according to the opinion of his neighbors. The election is a vote of confidence and an honor not to be despised.

On Builders

Ten years ago the finest place for constructive school work was in the great West. That was the last American frontier and the tide of immigration was still at the crest in 1914. It was a country where new enterprises were a matter of daily concern. The men who came out here were always ready to take a chance on any plausible innovation. Everyone was making money and expected to make more. There was adventure and romance in the challenge of the prairies east of the Rocky mountains. The honyocker dwelt upon a great future; he felt the quickening of a new life about him. He made vast plans of real estate deals and irrigation projects and engaged in spirited fights over county boundaries and county seat locations.

Every town had a club of boosters who went to extremes in telling impossible stories about the new region which everyone believed. They built schools and churches with a lavish hand. They hired schoolmen who liked to build and boost. There was a lot of waste in the hustle on the frontier. There were a lot of policies which savored too much of professional promotion. There was often money spent where it did little good. The honyockers and their men in the public schools made more mistakes than they had fingers and toes.

And yet they were builders and the country was founded on faith and hope. The superintendent who liked to build found a congenial atmosphere out here in Montana for the country was in a boom and every little town was doing a thriving business on borrowed money. I can remember when the streets of Ismay were as crowded as busy corners in Chicago. Those were the good old days!

One cannot help but contrast the situation to that of the present day. Three unfruitful summers dried up the boom. There followed a cry for retrenchment and an urgent demand for a niggardly policy which is often quite as misguided as the extravagance which brought the necessity about. The superintendent who likes to build and is used to having plenty of money at his disposal finds himself in strange waters. The superintendent these days has to learn to carry on with an incompetent budget and an insufficient staff. A new type of administrator is called for; one with caution rather than enthusiasm. Financial acumen stands him better in hand than a set of boosters' tricks.

And who shall say that the new type is to be less respected than the old? It requires as great technical skill to make few means go a long way as it does to build with a lavish hand without too much care for the law of returns. The superintendent who would remain in this part of the West may gain a valuable experience but to one who has it in him to build; whose only craving is for creative effort which a generous virgin field affords, the change is a catastrophe.

On Qualifications

Every so often someone, usually a lay member of the community, sets about to devise a list of qualifications which a school superintendent should possess.

One such list which was printed conspicuously started like this: "The superintendent should be, first of all, a good business man." Another states that the head of the schools should be a moral factor in the community, preferably a member of some church organization. Next—here I am quoting a third authority—he should have thorough mastery of the teaching art. No one should be put in charge of a system until he has worked under a master. He should be a worker and a leader. The list goes on and on.

The trouble with such a synopsis is that the authors do not take into consideration the flexible character in the American system of education, nor the great variety of men and women, and the diversity of talent on the school board, on the teaching staff and among the individual members of every community.

It is obvious, of course, that a school superintendent must be endowed with certain elements of intelligence and certain strong characteristics. Yet intelligence and strength may take a great variety of forms and it is one of the most hopeful features of our system that a school may take advantage of a leader's strength and prop his weaknesses. To a marked extent a public school is a machine which can fit itself to its motive power.

One school superintendent is an extremist in method and routine. He can coach a teacher as well as anyone you know. Yet when it comes to financial affairs he is helpless. The janitor has to attend to every detail of the stock room and the chairman has to attend to the budget because if the money affairs of the district were left to the superintendent he would pilot them straight into bankruptcy. His own finances are always in a muddle.

He has been in his location fourteen years and no one may say that he has not been a success.

I know superintendents who could not teach a class as well as the most inexperienced novice. I know superintendents who take an active part in the affairs of their town, and others who do not and yet are equally successful. Some superintendents go to church every Sunday, others do not. So it goes.

A wide acquaintance with schoolmen will reveal the fact that many are successful in spite of marked faults. The superintendent may fail along certain lines of school work and if some member of the teaching staff, the board, or the community supplies the deficiency no particular harm or inconvenience results.

This is rather a consoling thought. Democracy has operated very well in district school affairs. Ninety-five per cent of our people—and the reader will remember that these statements are based on small town experience—have a fairly good idea as to what is going on in the school and fully as many want the school to do well. We shall continue to get along with imperfect school administrators for the reason that there will never be enough perfect men to go around.

On Business Letters

I have a friend who is a business man. He and I disagree on some matters of pedagogy. He criticizes the curriculum because it does not include more practical business matter.

"I never did know a high school graduate," he says, "who could write an intelligent business letter." I suspect that my friend did not think up this criticism himself. His is a mind that gives off only reflected light.

My friend is a hustler and he greatly admires other hustlers. He speaks enthusiastically of business methods and business efficiency. He likes to talk about "big men," and when he mentions "big men," you may know that he refers to men who have a great deal of money.

Last Christmas I sent a gift parcel to my friend and elicited the following reply:

"Yours of the 23ult. received and contents noted. I want to assure you that the shipment was 100% right and hope to return it with interest. Business has been quiet since the first of the year but our holiday trade was fair.

Very truly yours,
P. X. Q.

P. S. My regards to the Mrs. and the Shaver."

It is hardly justified to answer one criticism with another, yet one cannot resist the temptation to shake the pedestal under the vast conceit of some self-styled practical men. I agree with my friend that seventeen-year-old boys and girls cannot write quick, snappy business letters. Nor can they compose a Shakespearian sonnet or file a saw. I doubt if more than a tenth of the business men can write a business letter which displays more than three syllables of originality. Very few adults can write a passable letter of friendship, and my good friend is not among those who can.

The school may teach a child grammar and spelling, but it cannot instill into his mind the traditions or the jargon of business. Your adolescent cannot write like a business man because he never has had any business to write about. To write even on a familiar subject requires long and arduous apprenticeship. To write on an unfamiliar subject is not humanly possible.

My friend should not hesitate to employ a youngster just because he is not a past master at business letter writing. Let the boy be surrounded by the atmosphere. His mind will learn to function along the grooves worn by countless generations of business men. He will learn a few stock phrases by heart and his letters will be as full of copied "pep" and "jazz" as my friend could desire.

The Selection of Teachers

Ben W. Frazier, Head of Department of Education and Principal of Training School, State Normal School, Jacksonville, Ala.

About a year ago one of the larger industrial corporations of the south was in need of 45 laborers. The employment agent was sent to Mexico and secured the men. The total expense for transportation of the employees and their families, together with the expenses of the employment agent, was something over $800. In order to provide desks and equipment for the new classrooms made necessary in the schools of the industrial municipality, the purchasing agent sent out bid forms to a dozen firms distributed well over the United States. The city manager then asked the superintendent of schools, newly secured from a typical old-line system: "How about securing a teacher? Need anything on your personal expense account?" The superintendent, true to all the public school traditions of parsimony he knew, replied: "Oh, no trouble at all. Two cents for a postage stamp on a letter to the nearest teachers' agency will turn the trick." It may be worthy of note that this superintendent of schools is now browsing in pastures new, and that the city manager is the present superintendent of schools.

Roughly, three-fourths of our expenditures for schools in this country goes for salaries of teachers. The salaries of new teachers last year amounted to around $130,000,000. Not one-tenth of one per cent of this sum was spent on specific employment procedure. Corporations think nothing of spending from two to five per cent of their total wage cost for employment expenses necessary to secure laborers.

The officials of school systems may take lessons on other phases of personnel management also from business and industry. Job analysis, job specifications, and employment management should be familiar terms to employing officials of schools. The yearly scramble for positions on the part of the members of the teaching profession—a profession which could take lessons from any labor union in placement of its members—could be obviated. A few lessons well learned from any good personnel management would result in more transfers of teachers and fewer discharges, in fewer mistaken assignments of teachers to unsuitable positions, and in fewer disgruntled communities and dissatisfied school patrons.

Methods of Selection

What methods of teacher-selection may a superintendent or board best follow? The problem begins when employing officials attempt to ascertain the probable number of vacancies for the ensuing year. When the budget is made, the amount allotted for teachers' salaries sets pretty definitely the number, and most important also, the quality of teachers to be employed. In a growing system the superintendent must estimate carefully his future school population, after the fashion of telephone companies for their subscribers of tomorrow. He must take care of new departments. Projected extensions of work in school or out call for foresight in providing teachers who can aid in such work. The heavy professional demands made upon teachers nowadays catch many superintendents napping when they select teachers solely upon a basis of grade-making ability in college. The superintendent of schools of Battle Creek, Mich., who has attained more than local repute as a successful employer, states that he selects very largely the active, promising students in normal school or college; the type showing promise or power of leadership, as instanced in school or student group activities. This type is selected in preference quite often to the conventional type of "safe" or experienced teacher. Now leaders in college or elsewhere cost more

than the mediocre, and the budget will determine how many of them may be secured. It is a fact that the more personal and individual services afforded by the more commonly recognized professions offer rewards which take too large a share perhaps of the brains of the community away from community service; only when the community wishes more of the service schools give will the budget attract leaders which fees of other professional work now command.

How may a school system make the most of the money it has when selecting teachers? Most employers are the losers when they elect and reelect very late in the employing season. The enterprising superintendent, who begins in the middle of the year to look about for the outstanding successes among teachers in his section and who is otherwise busy on the problem of a faculty for the coming year, has a decided advantage over the employers who begin in April or May. Late elections in some sections are, however, quite the usual thing, usually to the decided disadvantage of employers. One county superintendent in Alabama, when asked why his board never elected teachers until late in the summer, gave as the reason the excuse of the board that the members were busy with the work in the cotton fields, and unable to get together. The president of the normal school serving this territory is flooded with requests for teachers from September to January.

Early reelections are advisable in most situations; inevitable vacancies are sooner known, teachers sign their contracts or make known their intentions to leave at an earlier date, and the superintendent can then have an idea of the positions he must fill. It is best to insist on the return of signed contracts within a reasonable but very definite period; there is much negligence on this point in the less systematized schools. Of course, there will be changes later but the superintendent who knows at least tentatively a year or more ahead of time the nature of probable expansions in his system, who insists on early reelections, and who has the signed contracts in within ten days or two weeks, has an enormous advantage over the executive who is still guessing in late spring as to the number and kind of teachers he must secure for the following year. In many normal schools and colleges the best material for teachers is all taken up by Easter. The teachers who find it hardest to locate and who are very often the poorest are relatively the most plentiful toward the last of the season. The directors of training schools very commonly report that their best teachers are placed early in the spring. The best teachers as a general thing never have to hunt jobs very long or very late in the season. They are quietly taken up by the wide-awake schoolmen always on the lookout for them. In one normal school in the middle west the superintendent from an adjoining state annually corrals about half the senior class in March or April.

The Superintendent's Part

Who should select teachers? The superintendent, his assistant, sometimes the principal or heads of departments, should, of course, be given the power to seek out teachers. The superintendent will nominate after selection, and the board will appoint or elect. No good organization will permit the existence of very many situations where responsibility is entrusted without authority; the executive head of the system is most responsible for results, and should be given the power to choose his workers. Very few lay members of boards of education have the ability to judge the necessary qualifications of teachers, and family relationships, political affiliations of social or party nature and all the thousand and one group ties possible are almost certain to creep in when individuals of the board, or even the board as a body selects teachers. The former custom in Nashville, Tenn., of board members nominating from the floor the prospective teachers was comparatively harmless, when we consider what may go on behind the scenes at the expense of little children. In school systems, on the other hand, where business men and business methods prevail, the superintendent is often given virtual power of teacher appointment. Good results uniformly follow in the wake of the superintendent who goes out with a handful of blank contracts early in the spring, with blanket powers of teacher employment.

Given this opportunity, where will our superintendent or his assistant look for his teachers? It would seem the various state departments of education might reasonably be expected to function in so important a work as teacher placement. A recent unpublished study by the United States Bureau of Education shows that fifteen states have regularly established bureaus for teacher placement, and nineteen have bureaus which are maintained incidentally. Perhaps all of our higher state educational officials at some time are called upon for advice as to desirable candidates, and learn during the course of their work of vacancies, especially in the higher places. In some states the teachers' associations conduct employment bureaus; theoretically this service which professional people may conduct among themselves should be encouraged and expanded.

The states which have regularly established bureaus in connection with the state departments of education, and to which the superintendents of schools may look more or less hopefully operate with varying degrees of efficiency in these states: Alabama, Indiana, Iowa, Maine, Massachusetts, Minnesota, Mississippi, Nebraska, New Hampshire, Oklahoma, South Carolina, South Dakota, Texas, Virginia, and Wyoming. Nearly all these states have bureaus authorized by specific legislative acts. Most of them are operating under serious lack of funds, as recently in New Hampshire, where the service was given no appropriation originally at all. On the other hand, the splendid record of the State Teachers' Employment Bureau of Minnesota in this field is suggestive of interesting possibilities. For the year ending June 30, 1921, sixteen hundred teachers were enrolled, and 995 were placed, at salaries aggregating $1,432,261. In the three months of July, August, and September, 1921, seven hundred teachers were placed, at salaries amounting to $878,488. For 1922-23 there were registered 1,898 teachers, and 945 were placed at salaries aggregating $1,156,540. The aggregate of salaries secured by teachers assisted to positions by the bureau since 1913 amounts to well over $7,000,000. How much of this might have gone

to commercial agencies at five per cent of salary were it not for this service? How much more has been done toward putting teachers in the right place, and supplying schools with the service they desire, and which is somewhere potentially available?

Some Present Inadequate Methods

The present methods of securing knowledge of and contact with teachers are deplorably inadequate. A great number of teachers are selected yearly upon the strength of a two-page letter of application. At best a hasty interview, with standards of judgment upon which no two superintendents agree, and the job is done for one year and perhaps for more than one year. Employing officials trust very largely to applications on the initiative of teachers, and some sort of selection from such applications as drift in is made. Baseball managers have a better system; their scouts are abroad early and late and the promising players all over the country are known. Boston among all our cities is known for her efforts to secure good teachers from adjoining districts; paid officials visit schools within a fifty-mile radius and the best teachers are invited to consider the opportunities in Boston. A school superintendent should keep both eyes and ears open at teachers' meetings, associations, and similar gatherings, and should glean from every source information about promising teachers. He should visit normal schools and colleges during the year and should pick first-hand his teachers. Training school principals as a rule will arrange opportunities for prospective employers to observe teachers actually at work. Often the normal school officials will with the visiting superintendent choose the larger part of a faculty. Sometimes the president or principal of a normal school is in effect the employing official of some school systems.

Probably the teachers' agencies place more teachers than any other single source of service; but they generally charge five per cent of a teacher's salary the first year for their services. Occasionally they may be the cause of some of the reputation of teachers being "birds of passage" and in the old days occasional abuses of their function by irresponsible managers came about. There is no longer, however, any question of the enormous extent of the work done yearly by the commercial placement agencies. There are roughly 150 of these agencies in the United States. The wise teacher will at least keep in touch with their work in the present stage of teacher placement organization in America.

The teacher placement bureaus of many colleges are not as efficient as the agencies in very many instances. They are often conducted upon an academic basis, with little financial support, but considering their limitations they perform reasonably good work. They do not often seek vacancies for their members, but wait for boards or superintendents to inquire for applicants. This is in keeping with a dignified professional spirit in which colleges should participate, but there are so many poorly qualified teachers out in the field who are in keen competition with students that the latter must perforce get out and join the general scramble. Boards are also slow to remember the great possibilities of service of the college placement bureaus. State placement bureaus are too often not used by practical employers. Generally they are very slow in a time when employers and prospective employees must move fast. Their financial backing is also generally limited. Probably the largest college bureau is that of Teachers College, New York City. The salaries of members placed last year was well over one and one-half million dollars, and every effort is made to serve worthy students. In the history of this Bureau of Educational Service over 15,000 students have been aided in securing positions. The University of California probably ranks second in size in the United States for service of this type.

How to Find a Job

How many teachers best secure good positions? The best teachers are sometimes invited to accept positions by up-to-the-minute employers; but most teachers must join in the rush for places on their own initiative. A superintendent who does not have from five to twenty-five applicants for an outstanding vacancy feels something is wrong. One superintendent reports 300 applicants for a position, and he himself was probably chosen from two or three dozen applicants for his superintendency. It would astound many a superintendent to discover the amount of time his teachers presumably take from their lesson-planning to write for other jobs and to fill in agency application blanks. And what secrets many boards of education and their superintendents keep from each other in the springtime! It is worthy of note in passing that the higher positions in education are rarely unduly snowed under by applicants.

It behooves the hopeful aspirant, then, to play the rules of the job-getting game as at present accepted. She will secure the attention of a few professors whom she may later use as references. She will write to schools where she would like to locate, and to her friends who may later help her. A girl of ability is generally known to at least a few potential employers, and her opportunities often come from their direction. The normal placement service helps her; the principal or president of the school can if sufficiently interested be of enormous help the first year. If anxious for a job, the agencies and other placement bureaus are always at hand.

How should the teacher apply for a position? She will in most cases either write for an application blank or send in a personal letter of application incorporating more or less important data. Although obviously the greatest care should be exercises in working out a letter perfect form, the average teacher very often gives away derogatory secrets concerning her early schooling and general cultural environment, in her letter of application. She probably conceals more, however. Hence the quite necessary requirement for the personal interview when it is at all possible to arrange it. A typewritten letter giving the information generally known to be required by employers, perfect in mechanics, marked by an atmosphere of sincerity and earnestness, and accompanied by a small photograph and copies of a few general references, now rapidly going out of use, will receive consideration. An immediate answer is not to be always expected. Successful applicants will generally send out more than one application, though the usual theory put forth by the normal school or college professor whose tenure is reasonably safe is that the market should not be flooded with applications. Such practice is not in line with professional ideals to say the least. It is desirable for an applicant to induce the most influential friends she has to write or wire in her behalf. A telegram should always be answered by a telegram.

The most satisfactory procedure which either employer or prospective employee can follow is to arrange for a personal interview. Of course, the applicant must appear at her best; she can never be quite certain upon what points her interviewer will focus his attention, but consciously or subconsciously she will probably leave in her interviewer's mind some impression of her appearance, quality of voice, and outstanding peculiarities. The conversation should not all be one-sided in the effective interview. The employer will have before him in black and white the data necessary for minimum employment requirements; much of the interview may then be devoted to ascertaining the indirect but not less important facts relating to personality and intangible values which make the difference between teachers of the same education and experience.

The teacher is presumably entitled to ask as many questions as the employing official, though for practical results there are a few questions she may well let alone, at least for a while. Certification requirements, living expenses and accommodations, peculiar community standards, type of work, and other information should be ascertained before the teacher leaves town.

How Evaluate the Applicant

What are the standards by which employing officials evaluate the abilities of prospective teachers? Here is an extremely unsettled and miscellaneous body of practice. The average superintendent prides himself upon being a good judge of human nature, and of teacher-nature in particular. But any two superintendents will rarely agree upon even the traits to look for, much less on the relative weight to be assigned the many complex traits and qualifications which present themselves in the person of the applicant. In fact, no satisfactory system of rating the work of teachers already employed and actually in service has been widely adopted. Studies along this line have been made by Elliott, Strayer, Rugg, Knight, and many others. No system known is very reliable, because of the many variables entering into the make-up of teachers, and in the minds of their judges. Rugg's rating scale for teachers is probably the most scientific of its kind, though there are many other good ones in use. To make a rating card or other system of evaluation of prospective teachers when they are often never seen before employment and at best interviewed for a few minutes, would seem to be a particularly futile task. The present methods used by employers for judging applicants are still largely the old guess and snap judgment methods. "How," asks a Vermont country school board member, "can a feller look over a bunch of purty girls and tell which 'un will make the biggest hit?" Superintendents all think they know, but since no two agree on the characteristics to look for, scientific verification is all against them. A recent study may be suggestive: A questionnaire was sent to 420 superintendents and 183 school board members. (See Educational Administration and Supervision, 1917.) Weighted returns given are self-explanatory:

Qualities considered essential in teachers	Relative weight given each quality
1. Scholarship & Education	1268
2. Discipline and governing skill	1198
3. Teaching skill (methods)	1173
4. Strength of personality	1068
5. Understanding of children	975
6. Cooperation and loyalty	967
7. Daily preparation	882
8. Enthusiasm	839
9. Initiative and originality	832
10. Poise or balance of mind	794
11. Sympathy	733
12. General appearance	722
13. Vigor	653
14. Voice	582
15. Social qualities	509

It is interesting to note, after considering the above qualities from the viewpoint of prospective employers, that the same employers, when considering dismissal of employed teachers, would put failure in discipline and governing skill as most important, and teaching skill in second place.

A more careful and thorough study of the whole subject should be made by some of our budding doctors of philosophy or others. That the subject is most important is noticed at once when we remember that the teachers who enter the profession ostensibly to devote their lives

(Continued on Page 139)

Educational Supervision

Charles E. Scott.

III—The Economy Aim of Supervision

Economy in the Educational Program an Important Consideration

Although we may be a "nation of sixth graders," educational standards are steadily rising and the tendency is to lengthen the period of compulsory school attendance to eight years. If high school enrollment may be taken as a criterion, public opinion is gradually coming to the point of favoring even a longer period of training. Certainly it is the ambition of more parents than ever before to give their children twelve, sixteen, and even twenty years of school training.

Economy in the educational program from the standpoint of society. As the standards of education rise the problem of economy in education becomes proportionately more serious, both from the standpoint of society and of the individual. From the standpoint of society, the tax burden becomes a serious one, and a longer period than is necessary may discourage public support of education. As the school period is lengthened the number of non-producers in society is proportionately increased, for as our schools are now organized pupils are almost entirely non-producers and probably always must be largely so. An argument less frequently advanced, but one that is probably of primary importance to society, is the eugenic argument. Eugenists assert that there is probably no factor that has more influence in limiting the birth rate among the superior classes than the lengthened period of school training.[1]

Economy in the educational program from the standpoint of the individual. Economy in the educational program is of utmost importance to the individual pupil. The fact that American youth graduate from college, on the average, at least a year later than do European youth means that the former begin the pursuit of their life's work under a handicap as compared with the latter. A prolonged period of school training means a correspondingly later entrance into the occupations and matrimony, making the adjustment to both industrial and domestic life more difficult. As important as these considerations are, however, perhaps the most damaging effect of a lack of economy in our educational procedure is to be seen in the kind of habits formed by pupils of superior ability as a result of listless, half-hearted prosecution of their work due to our permitting the mediocre pupils to set the pace in school work.

The schools are charged with wastefulness. In the face of the many charges that are brought against the schools by newspapers, business men, patrons, and the public at large to the effect that the schools are failing, that there is appalling waste of time, money, effort, motion, and energy, the problem of increasing efficiency and of eliminating waste looms large. Investigation from within has rather given strength to the charges than weakened them. Starch concluded that one-third of the pupils of the public schools waste time as a result of being in classes in which they are able to grasp little of the subject-matter and are able to do but poorly, if at all, the tasks expected of them.[2] Terman says, "More than ten per cent of the $400,000,000 annually expended in the United States for school instruction is devoted to re-teaching children what they have already been

taught but failed to learn."[3] It is estimated by experts that most of the schools of the country are less than 50 per cent efficient, whereas the three best city systems examined are 80 per cent efficient.[4] There is waste when we teach subject-matter that has no particular value; when we teach without clearly defined aims and plans; when we teach without systematic check on deficiencies and attainments; when we continue to teach a pupil what he already adequately knows; and, when we permit pupils to form bad habits of study and work.[5] Certainly the problem of economy in education is a pressing one, demanding the most careful consideration and the most vigorous attack of administrators, supervisors and teachers.

The relation of supervision to economy of pupil progress. Securing the largest returns for the expenditure involved is the prime purpose of good school management. In so far as it is to be secured through a reorganization of the school to provide for a regrouping of the school years, a longer school day, evening classes, summer schools, and the like, it is an administrative problem, the discussion of which would be out of place here. In so far as it is to be secured through a better classification of pupils and a better adjustment of subject-matter and methods to the capacities, abilities, and interests of the learners, it is a supervisory problem.

Economy in the child's educational progress—an aim of supervision. The supervisor is, in a sense, the efficiency expert of the school, for he is charged with the responsibility of seeing to it that the child learns the right things at the right time as well as possible, as quickly as possible, and as easily and pleasantly as possible. The responsibility for securing all the conditions that tend to economize the time and effort of the learner so that both the teacher's efforts and the pupil's efforts shall be most productive and their time most profitably spent is his.[6] We may, therefore, state as the second aim of supervision the purpose to secure economy in the child's educational progress.

Economy Results from the Application of Scientific Methods

Economy in any procedure comes only as a result of the application of scientific methods based on accurate knowledge of materials and means. If pupils are to learn economically, education must be put on a scientific basis and teaching must be raised to a level as nearly scientific as possible. Educational supervision has depended too long on tradition, opinion, snap-judgment, and rule-of-thumb for its guidance. Scientifically derived facts are the keys to all school adjustments. Fortunately, we have the means, namely, mental and educational tests, for deriving the data needed in making some of the most important adjustments. Good supervision will make use of these, for effective supervision will determine nothing subjectively that can be determined objectively.

A fundamental principle of learning is that the task must be adjusted to the ability of the learner. That the teacher should "begin with the child" and that in learning we proceed from the known to the unknown have become axioms of teaching. But how can the teacher begin with the child without first knowing where he is in his development? And how can the teacher proceed from what the child knows to what he is to know without first determining what he knows? Evidently the first essential to good teaching is accurate information concerning the learner. If the purpose of education is to equip the child with the controls of conduct, the teacher must know the status of the child with respect to these controls in order to be able to teach him those things which he needs to know and give him practice in those activities through which he is to acquire the skills, habits, attitudes, and appreciations which he should acquire at that particular stage in his development. If the child is to learn economically, supervision must see to it that instruction is adjusted to the stage of development of the individual child.

Mental measurements should be made at the time the child enters school to determine his mental capacity, natural abilities and aptitudes, and frequent samplings should be made as he advances through school to determine the extent of acquired abilities and the effectiveness of instruction. Whatever adjustments the supervisor recommends to the teacher should be based on a cumulative record of the most accurate and reliable data obtainable and should include physical reports, the results of mental, educational, and vocational analysis tests, teachers' estimates, and school records. Only on the basis of incontestable and well-organized data may teachers and supervisors reach agreement as to valid conclusions with respect to adjustments that should be made.

Economy through scientific classification of children. Under ordinary school conditions children are not dealt with individually; so economy of pupil progress is a matter of classifying and grouping children as well as a matter of pupil diagnosis. The only purpose of grade groups is that the teacher may have grouped together for instruction those children who can profit most from the activities and experiences which that teacher is to lead them through. It is important, therefore, that each group should contain only those children who by reason of their abilities and stage of development are able to profit more from participation in the activities in which that group engages than from participation in the activities of any other group. The fact that children of the same chronological age differ widely in mental age makes the classification of pupils on the basis of chronological age alone an impossibility from the standpoint of economy. In Terman's study of one thousand school children he found, in general, a fair degree of correlation between intelligence and grade progress, but he found also some striking exceptions. "Nine year intelligence was found all the way from grade one to grade seven, inclusive; 10 year intelligence

[1] Popenhoe, Paul—Johnson, R. H., Applied Eugenics, p. 275.

[2] Starch, D. D., Standardized Tests as Aids in the Classification and Promotion of Pupils. 15th Yearbook National Society for the Study of Education, p. 143.

[3] Terman, L. M., The Measurement of Intelligence, p. 3.

[4] Shearer, Wm., Elimination of Waste in Education, Proc. N. E. A., 1920, pp. 313-315.

[5] Bennett, H. E., School Efficiency, Chapter XX.

[6] Wagner, C. A., Common Sense in School Supervision, p. 23.

all the way from grade two to grade seven; and 12 year intelligence all the way from grade three to grade eight. Plainly the school's efforts at grading fail to give homogeneous groups of children as regards mental ability."[7] Starch, after considerable research with educational tests, concluded that one-third of our public school pupils are promoted too slowly and another third are promoted too rapidly. In the various school subjects he found an overlapping of the ability of any grade into that of the next grade below of from 23 to 32 per cent and into the next grade above by the same amount. That is, with respect to ability in one of the elementary school subjects probably only one-third of the pupils of a grade belong in that grade. Any supervisor can verify these statements by giving a series of standardized tests covering three or more grades, provided his pupils are not classified according to ability. Why should the supervisor spend time rating teachers, examining lesson plans, sending out typewritten and mimeographed reports and criticisms, and holding teachers' meetings for the purpose of improving instruction while the first principle of successful group instruction, namely, that the group must be homogeneous, is violated, as it apparently is violated in practically every schoolroom?

Usually the instruction is adapted to the middle, or the mediocre, group, and the brightest pupils of the class mark time while the dullest are left to repeat the grade. The result is not only a tremendous waste of time and effort on the part of both teacher and pupils of both types, but the brightest pupils are mentally benumbed and form bad habits of work while the dullest are continually prodded, nagged, "failed," and inevitably disheartened and discouraged to the extent that they come to look upon themselves as incompetents and failures. This is one kind of attitude that supervisors are allowing teachers to establish in the minds of their pupils! "Nothing succeeds like success," and there is no finer attitude which the schools can help to establish in the minds of youth than that which comes as the result of having done well the tasks set, provided they are difficult enough to require honest effort on the part of the doer.

The main objective of the economy aim of supervision. It must be remembered that the only kind of school activity which has real educative value to the pupil is pupil activity.[8] Furthermore, the best progress can be made when the pupil is engaged in activities suited to his mental capacities and possible level of accomplishment. The economy aim of supervision should have for one of its main objectives the promotion of the maximum opportunity of each learner and the equalization of opportunities for all the learners of a group according to their respective abilities. Group instruction may be said to be economical, and opportunity may be said to be maximum and equal for all learners only when the pupils of the group approximate the same level of intelligence and accomplishment in the various subjects which they are studying together.

Criteria to be used as a basis for classification. The first step in the classification of school children should be to segregate the feeble-minded and those border-line cases of such emotional, moral, or physical qualities as to make them undesirable members of a school group.[9] These are clearly cases for special institutions, or at least for special classes, and no teacher should be worried by the presence of such pupils in her classes nor should any group of normal minded pupils be subjected to the damaging influence of such cases in school. Having eliminated all those who clearly have no place in a public schoolroom, the next step is to classify those remaining into three or more groups according to their abilities as determined on the basis of intelligence rating, the results of educational tests, teachers' estimates, and school records, including the results of physical tests or the health record and perhaps vocational analysis. The number of groups will depend on local conditions, the size of the school, the number of teachers available, and the number and kinds of curricula that can be offered.

Organize such groups as suitable activities can be provided for. Unless the teachers and the community have been very well prepared for the change it may not be wise to reorganize the whole school, or even a whole grade, on this basis at first. Only such groups should be organized as suitable activities can be provided for. Since the superior group includes those who are probably most wronged by the traditional classification and also those of whom society may expect most and for whom the school should be able to do most, a good beginning may be made by organizing a "rapidly moving group" in each grade to which are admitted all pupils who according to the various criteria show exceptional ability. Later other groups may be organized as conditions permit.

A marking system should be agreed upon. It was suggested that teachers' marks be used as one of the criteria for the classification of pupils. Teachers' marks are notoriously unreliable, but not necessarily so. Here is an opportunity for supervisors to do a real service, both to teachers and to pupils. Teachers' marks are unreliable largely because they have no settled, definite, and uniform standards by which to judge either the quantity or the quality of work done by pupils. It is one of the duties of the supervisor to bring about agreement as to desirable standards by which to judge school work and to refine teachers' judgments. A marking system should be agreed upon and the essentials as to the quantity and quality of work for which each mark is to be assigned should be very definitely defined. These should be printed on the report cards or otherwise made known to pupils and their parents. This in itself acts as a check on the teacher's judgment. As a further check on the distribution of marks, the writer has found it profitable to devote a teachers' meeting occasionally to a comparison of teachers' distribution of marks with the "normal probability curve" of distribution. It will be found that unless teachers have had previous training along this line they will, either through ignorance or prejudice, often have little sympathy with the idea of a normal probability distribution. Free and open discussion supplemented by some trite comparisons usually suffices to win some appreciation of the value of the "normal probability curve" to the individual teacher and result in as keen interest in comparing the distribution of school marks with the curve as a child takes in comparing his score in arithmetic with the standard score for his grade.

Supervision must safeguard the progress of all comers alike. The criteria suggested for classifying pupils are not infallible, for it will occasionally be found that a child will not do well in the group in which he apparently belongs. This is especially likely to occur with "border-line" cases about which there can be no certainty as to which group they belong until a fair trial has been given. It may occur, too, when certain pupils have been arbitrarily put ahead a grade on the basis of the combined criteria. A pupil may be chronologically, physically, and mentally ready for a certain grade but lack the pedagogical foundation necessary for making progress in that grade. The supervisor should arrange for a period of coaching for such pupils. A pupil may be well placed according to the combined criteria and yet do poor work because of lack of ability to concentrate or because of poor study habits, in which case the supervisor should plan for supervised study. If all such efforts fail, there should be no hesitation in changing the pupil to another group. In any event, however, the classification and promotion of pupils should be the result of the cooperative effort of all who know the child best, including the parents and even the child himself. The responsibility rests with the supervisor for seeing to it that both the child and his parents realize the situation and the supervisor must see to it that efforts are directed toward securing their cooperation in making satisfactory adjustments.

Another difficulty may be encountered in the entrance from time to time of new pupils who must be classified. If these come from schools in which pupils are well classified and bring with them proper records, the difficulty will be slight. The traditional way of classifying new pupils is for the supervisor, principal, or superintendent to call the new pupil into the office and, having determined from his record, if he has one, what grade he has been in, to proceed to "quiz" him in the various subjects, perhaps giving him some written work to do. When he has satisfied himself, his conscience or his curiosity, as the case may be, he sends him to a teacher with instructions to "try him out." A much more expeditious and more just, and may it be suggested more humane, procedure would be to administer an intelligence test and a few educational tests for which standards are available. In this way it is possible to discover more as to a child's abilities and accomplishments in an hour and a half than can be discovered about them in weeks by the "quiz" and "try him out" methods.

When pupils are transferred from school to school or from system to system the cumulative record, containing all the data necessary for making proper placement, should accompany them. Often one of the most damaging things that can happen to a child's educational career is a transfer from one school to another. For some reason, teachers seem to take particular pride and pleasure in comparing the new pupil with their older ones to the former's disadvantage. They boast that pupils coming from another school are inferior in accomplishment and training and unable to do the work as well as pupils who have been with them longer. They sometimes insist on transferring new pupils to a lower grade before they have had time to become accustomed to the new order of things or to demonstrate their ability. On the average, perhaps, late comers are inferior pupils, since many of them represent the transient class of people, but great injustice may be done them by too hasty placement. The supervisor is under obligation to guard the progress of all comers alike, and he should see to it that the new comer is properly classified and that no hasty readjustments are made.

(Continued in June)

[7] Terman, L. M., The Measurement of Intelligence, pp. 73.-74.
[8] Bennett, H. E., School Efficiency, p. 225.
[9] Terman, L. M., The Measurement of Intelligence, pp. 87-88.

Presidents of Boards of Education

Sketches of Men Who Lead in the Administration of the American Schools.

LAWRENCE E. BARRINGER

President, Board of Education, Schenectady, New York

Mr. Barringer, president of the board of education of Schenectady, N. Y., a thriving city of 100,000 population in a prosperous section of New York State, presides over a body which has made wonderful progress in the last four years in advancing the educational interests of the city.

The schools have been unusually fortunate in the selection of members of the school board, the majority of them being college trained with business and professional ability; Dean Edward Ellery of Union College; Henry W. Peck, vice-president of the Adirondack Power and Light Corporation; Mrs. Hilda (Mrs. James) Boyle and Dr. Charles P. Steinmetz, the electrical wizard, until his death, when he was succeeded by Mrs. Mable H. (Mrs. George R.) Lunn.

A school building program involving the erection of two new elementary schools and two intermediate or junior high schools and the remodeling of three other elementary schools, converting them into intermediate or junior high schools, with a total expenditure of upwards of $2,000,000, has been successfully carried on, meeting with the full support of the city board of estimate and apportionment, common council and the citizens generally.

Lawrence E. Barringer was born at Washington, D. C., March 1, 1876. He attended the public schools of Washington, D. C., graduating from the central high school of that city in 1894. He spent two years in Galion, Ohio, first with the Born Steel Range and Manufacturing Company and then with the E. M. Freese Company, manufacturers of brick and tile machinery, where he became interested in the production of ceramic wares and entered Ohio State University in 1896 to take the first special ceramic engineering course offered in the United States. He left college in 1900 to become a chemist for the Columbus Brick and Terra Cotta Company of Union Furnace, Ohio, but returned to Columbus in 1902 and graduated from Ohio State University in 1902 with the degree of E. M., specializing in ceramics.

Mr. Barringer entered the employ of the General Electric Company, Schenectady, in 1902, as specialist in the production of electrical porcelain and in 1908 became Engineer of Insulations, in charge of the development and production of the insulating materials produced by the General Electric Company, including porcelain, mica, varnishes, enamels, cloths, papers, molded articles, etc.

LAWRENCE E. BARRINGER,
President Board of Education,
Schenectady, N. Y.

He was president of the American Ceramics Society, 1916-1917. He has been a member of the Schenectady Board of Education since 1918 and president of the board since 1922. His intimate knowledge of building materials and operations, his broad sympathies and comprehensive grasp of educational needs and policies have made him a valuable member of the Schenectady board of education.

DR. J. P. HARVILL,
President Board of Education,
Nashville, Tenn.

DR. J. P. HARVILL

President, Board of Education, Nashville, Tenn.

To his responsibilities as president of the board of education of Nashville, Tennessee, Dr. J. P. Harvill brings qualities and experiences so suited that it would seem his life had been in special preparation for his task—that he had, in fact, served up to it. In his youth identified with the country, he learned the countenance of its life and the heart of its people, gaining a sympathy with the popular mind and ideals. His educational and professional training have well equipped him for the cause of education; his contact with the business world has made him a practical man of every-day affairs; his leadership in great civic, national, and international movements has made him a citizen of the world.

Dr. Harvill was born December 6, 1871, in Hickman County, Tennessee, is the son of a Baptist minister, and is himself a member of that church. Reared in this atmosphere of spiritual leadership, it is not strange that his own life-work should have been molded in the direction of disinterested service. He was educated in the public schools of Tennessee, received his B. S. degree from Dickson Normal in 1891, and was graduated in medicine in 1901. For fifteen years Dr. Harvill was president of Shofner Hospital, a position which is a testimony to his standing among the notable physicians of its corps. In recognition of a wider eminence in his profession, he was elected president of the National Eclectic Medical Association in 1906; and for several years past has been treasurer of that organization.

Dr. Harvill has interested himself in activities along all lines of civic improvement. As president of the South Nashville Improvement Club, he gave untiring energies to the preservation of what was best in the older aspects of that section, as well as to progressive measures for its future. This able direction he transferred with his residence to the Belmont section when he became president of the Belmont Terrace Improvement Club.

He has identified himself with many branches of philanthropic work, holding at various times such important offices as president of the local chapter of the Red Cross; president of the Big Brothers; director of the Milk and Ice Commission; president of the Nashville Social Service Club; and director of the Davidson County Charity Commission.

In addition to these professional and altruistic activities, his directorship in organizations such as the Lion's Club and the Nashville Boys' Club gives evidence of his wide personal popularity, the natural result of a genial temperament and an innate faculty for fellowship.

His wide practical influence in the business world exhibits itself in such affiliations as the following: member of the Board of Transportation Trustees of the City of Nashville; director in the Nashville Savings and Loan Corporation; president of the Nashville Investment and Realty Company.

Himself a product of the public school system, Dr. Harvill speaks with a voice of loyalty and authority on that chief educational resource of the community. With a president of so much ability and vision, standing shoulder to shoulder with his superintendent in his forward-looking thoughts and his admirable projects (such as the twelve months' school term, now achieved), the people of Nashville feel that public education is safeguarded, and the future of this most democratic of institutions is assured.

W. FLOYD REAMS

Chairman, Board of School Trustees, Richmond, Virginia

The school board of Richmond, Virginia, is composed of nine members elected, three each year, by the city council from the three school districts. The lines of these districts do not coincide with any of the political divisions.

The personnel of the board has always been of the highest order. Board members have given their time unreservedly to the promotion of the welfare of the schools. Never, in all the history of the board, have factional disputes arisen, but, on the contrary, courtesy and cooperation have always characterized the deliberations of the board.

The oldest member of the present board in years of service is W. Floyd Reams, who for the past seven years has been chairman of the body. Mr. Reams has served continuously as

W. FLOYD REAMS,
President Board of Education,
Richmond, Va.

a board member for the past twenty years. He was elected when he was just 27 years old.

Courtesy to his colleagues, respect for the opinions of the administrative officers of the system, and an open and progressive attitude toward needed changes have characterized Mr. Reams in his work both as a board member and as chairman. He is a graduate of the public school system of his native city, and his highest ambition is to see Richmond have the best public school system in America.

Mr. Reams is assistant treasurer and purchasing agent of the Richmond Cedar Works, the largest woodenware factory in the world, with which concern he has been connected since the time he began his business career thirty years ago.

HENRY RAYBURN ROBINSON

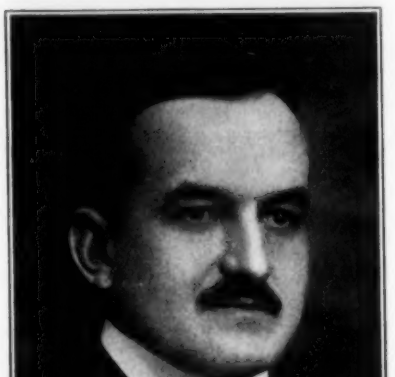
President, Board of School Trustees, Richmond, Indiana

Richmond has always had an exceptionally fine record in the type of man appointed to serve as school trustee. The character of the personnel of the Richmond board is well represented in the president, H. R. Robinson, vice-president and general manager of the Swayne-Robinson Manufacturing Company. Mr. Robinson is a member of one of the pioneer families of the community, was born and raised in Richmond, graduated from the local high school, and received his advanced training at the Massachusetts Institute of Technology. He is recognized in the community as a man of discrimination, high ideals, sterling character and executive ability. Starting as an employee in one of the veteran concerns of the city, the Swayne-Robinson plant, manufacturers of threshing machinery, which his grandfather established, he worked through the positions of foreman, assistant superintendent, and superintendent to this present position, which he has held since 1908.

H. R. ROBINSON,
President Board of School Trustees,
Richmond, Ind.

The confidence and good will of the people of the entire community have always been accorded Mr. Robinson. He is among those to whom the thriving city of Richmond is indebted for its commercial and civic prestige. He is a member of the local Rotary Club, of which he has been president; a member of St. Paul's Episcopal Church, has served as director of the Y. M. C. A., the Social Service Bureau, and many other civic organizations. He is at present the president of the board of directors of the Welfare League, which body administers the annual community chest campaign.

Mr. Robinson was appointed as a member of the board in July, 1921, serving for two years as secretary. He was elected as president of the board in August, 1923. During his membership on the board, the $400,000 David Worth Dennis junior high school has been completed and the Julia E. Test junior high school, at present consisting of main building, gymnasium and power plant, has been built and is now occupied. Mr. Robinson has brought to the board his ability as an executive of high rank and is rendering the community a high type of service in that capacity. A plan for a building program to extend over a considerable period of years is now being studied by the board, provision for subnormal children, and other children needing special attention, by means of special rooms; a salary schedule for teachers based on training, experience and success, are some of the items of accomplishment during Mr. Robinson's service on the board and to which he has given his thought and assistance.



DR. FRANK CYMAN,
President Hamtramck Board of Education,
Hamtramck, Mich.

DR. FRANK CYMAN

President, Board of Education, Hamtramck, Michigan

Dr. Frank Cyman, president of the board of education, Hamtramck, is serving his second year in this capacity. Dr. Cyman is a progressive member, having taken an active part in securing a salary schedule which has increased teachers' wages, in supporting a reorganization of the entire school system, and in promoting a comprehensive building program, which, when completed, will provide the most modern buildings and equipment for the city of Hamtramck.

Dr. Cyman has also championed a successful move to define the work of the administrative officers of the school system, giving them complete executive power and reserving for the board of education only legislative functions. He is a student of problems which confront members of boards of education.

Hamtramck is one of the most rapidly growing cities in the country, having a population at the present time of approximately 75,000, a large part of whom are Polish. Dr. Cyman, though of American birth, is of Polish extraction and is a fine illustration of what a citizen, embodying American ideals, may accomplish for educational advancement in his community.

WILLIAM B. REED

President, Board of School Inspectors, Peoria, Illinois

Peoria has been proud of her school system for years and she is unusually proud of it this year. The board of school inspectors has been actively interested in school progress and its members have been effective not only in attending to the business and financial ends of the school system but in securing the ablest educators and administrators to direct the educational work.

The president of the board of school inspectors in Peoria is William B. Reed, who was elected to the board, originally, in 1918, and who has served continuously ever since. He was elected president in 1922 to fill the vacancy left when Dr. George Michell resigned. Last spring he was reelected to the presidency.

Mr. Reed was born in Cambridge, Illinois, March 29, 1877. He spent his boyhood and early young manhood in that town, attending the schools there. For a time he was a student in the Davenport Business College. Later he moved to Peoria and engaged in the banking business from 1894 to 1914. The last four years of his banking life were spent as assistant cashier of the Commercial National Bank. Upon his retirement from banking he engaged in the farm mortgage loan business which occupies his time at present. In addition he is financial agent and business manager of the Barker estate.

Aside from his regular business and school interests, Mr. Reed is active in various civic work. He is a trustee in the First Methodist church, chairman of the finance committee of the University Club, and director of the Mount Hawley Country Club.

WM. REED,
President Board of Education,
Peoria, Ill.

"I am firmly of the opinion," said President Reed, "that too much attention cannot be paid to the schools. They are our biggest business. It is encouraging to note that public interest in schools is increasing steadily and that business and professional men are willing and even anxious to give generously of their time and training to take care of the school business. The schools in Peoria, if I am a judge, are efficient, and the school inspectors, administrators and teachers are raising educational standards which have always been high in our community."

Mr. Reed was elected last November to the office of vice-president of the Illinois State School Board Association at the convention held in Urbana.

ROBERT A. ODELL

President, Board of Education, Los Angeles, California

Mr. Odell, like most residents of Los Angeles, was born in the east. His secondary training was completed at Moline, Illinois. After moving to Los Angeles, he matriculated at the University of Southern California in the Liberal Arts College and later graduated from the law school of that university.

Although conducting a large and successful law practice, Mr. Odell has always found time to interest himself in the broader aspects of social and civic life. Among men, he is upstanding, highly respected and beloved. Recently he was made master of his Masonic lodge on which occasion a host of friends delighted to do him honor, not only men in the fraternity but men and women who have been for the past several years his business, professional and educational associates.

It is, however, of Mr. Odell's abiding interest in the public schools and his unswerving loyalty to the principles of universal education in the nation and in his own state and city that one is moved to speak with enthusiasm. With penetrating understanding of present day school problems, as they are concerned with safe instruction, which is at the same time progressive and adapted to present day needs, with generous appreciation of the overwhelming problems that confront a school system such as that in Los Angeles where the community is confronted with housing problems of unparalleled seriousness resulting from the rapid growth of the city (in September, 1923, there were enrolled 36,000 more children than in September, 1922), Mr. Odell with quiet serenity marshalls the facts and with the help of the other most efficient board members dispatches a great volume of business without friction and without evidence of labor.

ROBERT A. ODELL,
President Board of Education,
Los Angeles, Calif.

As Mr. Odell is the only member of the present board who carried over from a former term, upon him has rested the responsibility of securing a continuity of policies. His earlier experience on building and finance committees during a bond campaign for the raising of more than $17,000,000 and during the sale and expenditure of a large part of that sum was the best sort of preparation for the presidency for which he was unanimously chosen by the board which took office July 1, 1923.

A characteristic of Mr. Odell is his carefulness to answer no question and reach no decision without having all available facts. Equally to be admired is the absolute fearlessness and finality of his decisions when questions of right and wrong are involved. In dealing with the public, Mr. Odell is frank and courteous, and especially successful in adjusting difficult situations in a generous spirit without making dangerous concessions. Fortunate indeed is any city, and doubly fortunate is Los Angeles in these days of rapid expansion, to have an entire board of education made of intelligent, open-minded citizens devoted to the high interests of public education, who understand the necessity of administering the public schools without self-interest and self-seeking, and to have as president of that board a man of the type of Robert A. Odell.

WILLIAM ROY LITZENBERG
President Board of Education, Pasadena, California

Mr. Litzenberg was born in Russell, Lucas County, Iowa, July 23, 1875. His father, Benjamin Franklin Way Litzenberg, a civil war veteran, was born in Pennsylvania, and his mother, Mary A. Litzenberg, was born in Indiana. He received his early education in the grammar and high schools. His father died when Roy was past eighteen, and he felt that he must qualify to earn his living.

As a school boy he worked in the summers on the farm, and in the winters clerked mornings, evenings and Saturdays in a drug store, and at the same time learned the trades of painting and paper hanging. He entered the Capital City Commercial College at Des Moines, Iowa, and graduated therefrom in 1905. As stenographer and shipping clerk for the Aermotor Company of Chicago, in its branch office in Des Moines, he showed himself efficient, and was soon sent to the branch in Baltimore, Maryland, and was later called to the Home Office in Chicago. But being more interested in educational matters and in securing an education for himself, he later resigned and accepted a position as stenographer for the faculty and assistant librarian in the McCormick Theological Seminary in Chicago, which position, by reason of the intimate association with the faculty and the student body, was of great value educationally to him.

During the four years he held this position, he also took up the study of law in the Chicago College of Law, the law department of the Lake Forest University, and graduated therefrom in 1901, with his LL.B. He was admitted to the bar of Illinois on examination in October of the same year. During the next three years, he made a special study of the law of patents and trade marks, but was admitted to practice in the United States patent office June 24, 1902. He married Miss Ella Josephine Farrar in Chicago, July 7, 1903. Two children were born to them, Roy Farrar, and Charlotte Josephine.

He practiced his profession in Chicago until 1905, when he moved with his family to Portland, Oregon. He was admitted to the bar of Oregon in 1906. For a number of years he was connected with the legal department of the Harriman railroads, having special charge of the corporations and acting secretary of a score or more of these auxiliary companies. He held this position from 1906 to 1910, when he resigned to take up his special branch of patent and trade mark law, in which he practiced in Portland until 1917, when he moved with his family to California, locating his home in Pasadena, and his office in Los Angeles, in the Security building, where he has since remained.

WM. R. LITZENBERG,
President Board of Education,
Pasadena, Calif.

Mr. Litzenberg has always been interested and active in the religious and educational life of the communities in which he has lived. He is an active member of the First Baptist Church of Pasadena, and is superintendent of the Bible school. He is also a member of the executive committee of the Southern California Sunday school council of religious education, and of the missionary education movement of California. He is a member of the New Century Club of Pasadena, and of the Chamber of Commerce of Los Angeles.

On July 12, 1921, he was elected a member of the board of education of the city and high school districts of the city of Pasadena, to fill the vacancy created by the resignation of H. R. Bickley. In the election in June, 1923, Mr. Litzenberg was reelected to the board and at the reorganization of the board was elected its president July 2, 1923.

JOHN M. SEASHOLTZ
President Board of School Directors, Reading, Pa.

Mr. Seasholtz is a native Pennsylvanian. He was born and reared on a farm in Montgomery County, and is the oldest of a family of six children. Until he was seventeen years of age, he attended the rural school. At the age of twenty he was employed as a freight trucker on the Philadelphia and Reading Railroad and worked up to the position of assistant agent. After seven years' employ with the railroad, he took up office work with the Grander Stove Foundry. Later he represented the firm as salesman for eastern territory.

JAMES M. SEASHOLTZ,
President Board of Education,
Reading, Pa.

In 1912, he moved to the city of Reading and became superintendent of the Reading Stove Works. In 1916, he started in business for himself as a pioneer in porcelain enameling of stove castings. His enterprise and thoroughgoing methods have placed him in the ranks of the leading business men of the city.

His contacts with civic affairs of the city are enhanced through membership of the Chamber of Commerce, Rotary and Wyomissing Clubs. He is a member of the Lutheran Church.

Mr. Seasholtz became a member of the school board of the district in 1920 and has served as its president since December, 1921. At the reorganization of the board the first Monday in December, he was reelected president unanimously. Mr. Seasholtz assumes the duties of president with the same interest he takes in

(Concluded on Page 140)

Obstacles We Overcome in Maintaining Good Schools

By a School Board President.

Our board of education has just received word from the board of examiners of the state university that our high school has just been placed upon the fully accredited list of the university for a period of three years. That good news coming shortly after the visit to our school of the official high school visitor who spent some time in visiting the classes and the teachers in our high school, and in going carefully over our course of study and our equipment, marks the culmination of four years of hard work on the part of our school board and our superintendent.

Four years ago we were accredited to our state university for a period of one year on trial. Now we are fully accredited for three years, a rating equal to the best, for that three-year credit is the longest credit given any high school by our state university.

Some of you may wonder where the hard work on the part of the board of education came in in the securing of this advanced standing for our high school, thinking, of course, that the most work and the most credit for such an accomplishment should go to the superintendent and the faculty. In that you are correct, for it is the untiring effort of our teachers working in harmony with our superintendent and with the loyal support of the pupils themselves, that has brought about the change in our school.

But behind the superintendent, the teachers, and the students stands the board of education. And it is the attitude of the board of education and their stand upon educational problems which really govern the standing of the school. The board of education is the business manager and financial backer of every school, and the success of any school depends very largely upon its finances and business management. Without good business management and successful financing, no school can hope to succeed, no matter how strong the faculty or how loyal the student body.

In the success which our school has attained, the board of education has stood solidly behind the faculty and the students for better things in the way of education and in so standing we have had many obstacles to overcome before our school could take the position which it now occupies where it is "equal to the best."

Four years ago when our board of education started its drive for better things in the way of education for the children of our district, we realized that we must build from the foundation up. That foundation, we believed to be better teachers than the school had heretofore had. To secure better teachers meant that we must pay better salaries. Better salaries meant higher school taxes, and higher school taxes meant a roar from the taxpayers. Were we, the board of education, ready to stand before the taxpayers who elected us to office, declare ourselves for better things and take the hammering we knew we would be in line for if we increased our school tax rate? We decided that we were ready to make a stand for better schools. We increased our tax rate, secured the best teachers and the best superintendent we could find for the money we had to pay, and started our drive for a better standing for our school.

With the increase in taxes the roar of the taxpayers began but before the year was over a noticeable improvement in the school had taken place, and among the patrons of the school at least our increased tax rate had been justified.

One of the things which we did to increase the interest among the students themselves, was to increase the athletic activities of the school. To do this we had to have an athletic coach, and we searched long and diligently for the kind of a man we wanted, one who could handle athletics as well as some science and mathematics classes.

To secure a combination man of this sort we were forced to pay a pretty good salary; and in a locality which was naturally opposed to school athletics, the paying of a good salary to our athletic coach caused an awful commotion. But when that coach turned out successful teams, he secured a following for the school through those teams which the school had never been able to interest in school affairs.

Through our athletic teams the school secured the support of the younger element and those interested in sports, a class which in many cases had no direct interest in the school and was likely to be a disturbing political faction at election time. Through our athletic teams that faction became interested in the school and lined up with the school officials who were for athletics and believed in spending some money for the development of athletics in the school.

Public indifference, that worst of all foes of the public school system, was another obstacle which we had to contend with. Our athletic department took care of that indifference so far as the followers of sports were concerned. For the rest of the public we had occasional school plays and entertainments. We had receptions at which the teachers were hosts to the school patrons and general public and we had "go to school weeks" when everyone was invited to go back to school and see the school going through its every-day routine and doing its regular work.

All of these things helped to keep the school before the public and to keep up a public interest in school affairs. All of these various things helped in their own way to overcome that greatest of all obstacles, the opposition to school taxes.

School taxes seem to be the first thing that a disgruntled taxpayer jumps on when he begins to discuss the tax problem. School taxes are usually one of the leading items on the taxpayer's bill, one of the big items and the one that first comes in for censure when taxes are discussed.

In order to maintain good schools under present economic conditions school taxes are bound to be high. In order to justify those high school taxes a board of education must produce results in its school system that will justify the expenditure of those taxes, it must show that it has obtained value received for what has been spent in school work. When any school board cannot show value received for its supporting public, that school board is bound to come in for censure at the hands of the taxpayers and the school is bound to lose much needed support.

In overcoming taxpayer opposition our school board has been very careful in the expenditure of our school funds. We thoroughly discuss every move before we make it, and the thought is always uppermost in our minds that at the end of the school year we must be able to show our taxpayers a dollar's worth of service for every dollar which we spend. In keeping a check upon our own financial standing we also keep an eye on the financial standing of the other districts in our county, and once a year at tax time we publish a list of the tax rates of the various school districts in our county. By careful expenditure of our money we manage to always be down near the tail end of that list. Our tax rate is always one of the lowest in the county.

Then after publishing the various tax rates we go on and show the standing of our school as compared with other schools in the county. In that way, by a campaign of publicity, we try to demonstrate to the general public that we are returning value received for all the tax money which we spend.

This sort of publicity justification is not needed as far as the actual patrons of the school are concerned. The people who have children in school are in close enough touch with the school to know what results we are getting but the general public, and usually the general public far outnumber the actual school patrons, know little or nothing about school affairs except what they hear. And usually what the general public hears about school affairs is garbled and distorted rumors from persons who are not in sympathy with good schools. It is to overcome these wild rumors that our board gives out actual financial figures for public consumption and shows just what we are getting for the money we spend.

Here in our district we find that plan a very good one. No matter what a person's taxes are, if he sees that he is getting a "run for his money" he is less disturbed than he would be if he had reason to think that his money is being foolishly spent. And furthermore, if he sees that the taxpayers in some other districts are paying more than he is and are securing a less return in results accomplished, he is going to be all the more satisfied with his tax rate, his school, and himself.

We believe absolutely that it pays us good dividends to take the public into our confidence and show just what we are doing, what the other fellow is doing, and what it is costing both of us to do it. Sometimes these comparisons are not over enthusiastically received by some neighboring district, but even then it is worth while, for it stimulates in that district a desire to get even with us the next year, and in getting even they strive harder to give their district more for its money and a lower tax rate. Competition between districts is just as beneficial as any other competition. It very often results in giving the taxpayer more for his money and better schools besides.

I have discussed briefly the major obstacles which we have contended with in our battle for better schools. There are, of course, several minor petty obstacles, one of which is worthy of mention because of its absolute absurdity. We call that obstacle "cracker barrel politics."

The other day the editor of the local paper came to me with a long tale of woe about some people who were severely criticizing our superintendent. After a long and careful questioning this man admitted that there was no fault found with the school. Everyone admitted that the school was in fine shape but the whole trouble was that our superintendent was not trading as much at certain corner groceries as the proprietors of those groceries thought he should. These store keepers were trying to make capital out of this and were starting a movement to have the best schoolman our town has ever seen ousted because of his failure to trade at their stores. That illustration simply serves to show the varied and innumerable obstacles which a school board encounters in its battle for good schools.

Occasionally a certain element of the population objects to the company that certain teachers keep and wails because those teachers go to

(Concluded on Page 140)

The Beloit Teachers' Salary Schedule[1]

Frank E. Converse, Superintendent of Schools, Beloit, Wis.

The following salary schedule was formally adopted by the School Board of Beloit at the regular meeting on April 6, 1920, and made effective for the school year 1920-21. It has been in operation since its adoption, and except that its provisions are not generous, has proven very satisfactory to all concerned.

This schedule is an example of that type called "the single salary schedule" which, with varying details, has been adopted by a number of city school systems in all sections of the United States. It is based on the three factors —the teacher's educational preparation, professional training, and successful experience, and is called a "single salary schedule" because it pays an elementary or grade teacher the same salary paid a high school teacher if her education, training and teaching experience are the same. This is only fair and just to both teacher and children, as it is just as important to have well-educated, trained and experienced teachers in the elementary schools as in the high school; and if a teacher prepared to teach in a high school is better adapted to teaching younger pupils and prefers to do so, that teacher should receive the same salary in that position.

Salary Schedule, Beloit, Wisconsin

Class	Preparation	Years of Experience and Success Groups 1	2	3	4	5	6	7	8	(e)
I.	Wisconsin Normal School Diploma	1000	1050	1100	1150	1200	1250	1300	1350	1450
II.	Additional Year University Credits	1100	1150	1200	1250	1300	1350	1400	1450	1550
III.	University or College Degree	1200	1250	1300	1350	1400	1450	1500	1550	1650
IV.	Additional Year University Credits	1300	1350	1400	1450	1500	1550	1600	1650	1750

NOTES:
(a) This schedule applies to both elementary and high schools. The salary is to be paid in ten equal monthly installments. School time, 9½ months.
(b) Exceptionally strong and successful teachers may be voted double annual increases on recommendation of principal, supervisors and superintendent.
(c) The salaries of principals, supervisors, teachers of special departments, and of exceptional children, or with special additional responsibilities, will be adjusted individually.
(d) Only successful and progressive teachers will be advanced in salary, and unsuccessful teachers will not be retained for longer than two trial years.
(e) Exceptionally successful teachers may be voted super-maximum salaries as the board may determine.
(f) Fifty dollars additional salary will be paid at the end of each year to all teachers who attend a university or college summer term approved by the superintendent and earn at least four semester-hours of credits every third year.
(g) When earning credits toward promotion from one class to the next higher class a teacher's salary shall be advanced twenty-five dollars for the year following the completion of one-fourth of a year's credits.

The Schedule Described

By this schedule, therefore, teachers are classified into four groups—I, II, III, IV—determined by their professional preparation of two, three, four, or five years beyond a four-year-high-school course; and the initial salary for each class, with no experience in teaching, is shown in the first column of salaries. Then for each year of successful experience in the Beloit schools or equivalent experience in other schools of about equal rank, the salary advances each year up to a maximum indicated in the eighth-year column. Column (e) is a super-maximum salary that may be voted by the board to exceptionally strong and successful teachers only after these have taught at least one year in the Beloit schools. See note (e). The notes appended thereto are designed to make clear the intended application and administration of the schedule and are probably sufficiently self-explanatory, but it may be desirable to state more fully the reasons for the provisions made by notes (f) and (g).

It is desirable that all adults as well as children keep growing and extending their education, but it is especially desirable and important for the good of the schools, that all teachers keep growing and improving while in the service. This need is vital enough to be recognized in the salary schedule which is the only practical way, since the cost to the teacher of further university study is considerable and more than many teachers can afford. The average expense of tuition, transportation and living for one summer term of university study is estimated at $150. This amount is, therefore, returned to the teacher in three annual installments of $50 per year, if the teacher remains in the service of the Beloit schools. At the end of three years it is required that the teacher again attend a university summer term and earn at least four semester-hours of credits if the $50 additional payments are to be continued. Further, the semester-hours of credits earned in this way or by extension or correspondence courses that are accepted by the university toward a degree, are recognized by a permanent salary increase of $25 for each one-fourth of a year of credits earned toward promotion above Class I. In this way an elementary grade teacher who is a state-normal-school graduate may become a university graduate with a degree while continuing to teach during the school year.

Many of our teachers are taking advantage of these provisions with much satisfaction to themselves and real benefit to the schools and the children. The usual university summer term requires only six weeks of attendance. This leaves the teacher a full month for vacation rest and recreation, which is deemed sufficient by most well people. Further, the summer term at a large university offers the teacher much besides just the courses of study pursued. Besides the change and new environment, there is the contact with a large group of professional workers from all parts of the country, the stimulus of systematic study, and the consideration and appraisement of some of the newer, if not better, ideas being tried out in educational procedure.

No Rewards for Travel

The Beloit schedule does not offer any special inducement to teachers to take travel trips in the summer, as do some other cities having similar schedules. This is a deliberate omission, not because extended trips, giving the teacher a first-hand knowledge and experience of the country, is not considered very valuable, but because experience has shown that such a provision is difficult to apply and administer satisfactorily, and that he simpler the provisions of the schedule the better it is. However, the university summer term provision may be, and often has been, taken advantage of by our teachers in combination with the travel opportunity. Of course a majority of Beloit teachers attend the summer sessions of the University of Wisconsin, and Chicago. But some have also attended these sessions at Columbia, Harvard, and the Universities of Colorado and California. Further, some of our elementary and junior-high-school teachers already have completed, or are soon to complete, their work for a university degree. So far we have employed both university graduates and state normal school graduates in about equal numbers for junior high schools.

Local Influences on Salaries

It is not claimed that this schedule automatically meets and settles all salary problems that arise in the administration of a system of schools. In this city conditions are such that the schedule cannot be made liberal or high enough to secure the needed men teachers, nor teachers of special subjects and departments at the scheduled salaries for women teachers in regular positions. Beloit is not a wealthy city, and is also in the unusual condition of having no church nor private schools. As a result the public school enrollment is one-third larger than the average found in cities of the same population class. This means more school buildings, more janitors, and more fuel, as well as a larger teaching force, all of which means a higher expense budget than other cities of the same class have to meet, in spite of the fact that the amount expended per pupil in the Beloit schools is almost every year below the average of other cities of the same class. Fifty-four per cent of all local property tax in Beloit is for school purposes, as against 35 to 40 per cent in other cities.

Because of these conditions this Beloit salary schedule is frankly conservative and offers lower salaries to experienced teachers than the average paid in other cities of the same class. The consequence is that Beloit employs a larger per cent of inexperienced, though trained, teachers and is able to secure fewer teachers of mature experience.

Under this schedule most of our men teachers are employed to assume special duties and responsibilities in addition to the regular teaching load, or to teach in departments not so well suited to women teachers. In this way higher salaries than those scheduled are paid to nearly all of our men, and also to some women in the more technical departments. These higher salaries are adjusted individually as provided for in note (c) of the schedule, and whenever one of these higher-paid positions can be filled satisfactorily by promotion, it is done. So our teachers feel they have a chance to obtain the higher salaries later and regard them as a real part of the schedule.

Advantages of a Definite Schedule

A varied experience of many years in city school administration has convinced me that a definite, published salary schedule of this type goes far to insure that measure of stability which is essential to any real progress. Of course, the idea of a salary schedule is not at all new. For many years school systems large enough to require the employment of several teachers doing the same type of work have been guided by some sort of a schedule. But the main purpose of these has been to limit the salaries paid and to lessen dissatisfaction. The constructive principle of building up and increasing the stability of a teaching force was largely ignored. A maximum salary was usually kept in mind but not always a minimum, while annual increments were more or less variable and not always based on the just appreciation of merit. Further, there was often too large a difference between the salaries of elementary and high school teachers. It was easier for the latter to obtain better salaries because they usually had more influential connections, and because there were fewer of them the effect on the size of the budget was not so noticeable. This policy tended to set apart the high school teachers as a distinct and rather superior group. It ignored the really greater need of the elementary grade children, and overemphasized the difference between four years of college training and two years of normal school train-

[1]Read before the Department of Superintendence, Chicago, February 28, 1924.

ing. It also encouraged school boards to appoint untrained and otherwise poorly prepared teachers to elementary grade positions.

The single salary schedule, carefully worked out, regularly approved, adopted and published by the board of education overcomes this slipshod policy to a large extent. It tends to unify the teaching force into a more harmonious working body of greater stability because of definite promises for the future that are supported by public opinion and so are more likely to be carried out.

The single salary schedule is more nearly self-administering because it is more impersonal. So long as human nature and ability are imperfect, personal judgments and personal rating schemes will be unreliable in estimating and rewarding merit and efficiency. The more impersonal a schedule and its applications can be made, the more satisfactory it is likely to be, because it will tend to operate with greater justice to both pupils and teachers.

The single salary schedule deals justly with new teachers, practically assuring them of a beginning salary that recognizes the full value of their preparation and past experience, while at the same time it stands in the way of placement in advance of teachers already on the force. In the same way the resident or home teacher is protected as well as deprived of undue consideration.

Some Results of the Schedule

This schedule is now in the fourth year of its operation—not long enough to reap all the beneficial results expected, but some of them. The first result was to stimulate teachers to take advantage of educational opportunities. About one-fourth of the teaching force worked in the summer sessions of various universities during each of the past three summers. Last year a university extension course with a meeting once a week on Saturday morning was taught by a well-known professor from the University of Wisconsin in which a fair percentage of our teachers enrolled and earned their credits. This year a course is being given in Beloit College on Saturday morning that is well patronized. A few teachers are taking correspondence courses offered by the university. These are largely state normal school graduates whose diplomas are accepted by the university as covering the first two years of university requirements for a degree. An occasional high school teacher working for an advanced degree is found in this group, but ambition for the bachelor's degree on the part of state normal graduates appears to be more common than for a higher degree by college graduates. We do not push nor even urge our teachers to seek the higher degrees. Rather, we urge the need for increased teaching power and advise the taking of courses related to the teacher's special department, including general culture courses, and perhaps one course in education when attending summer schools.

On the whole, the effect has been to impress teachers with the idea that, if we are to be able to hold the gains made in the last few years in the matter of salaries and better working conditions, the service and effectiveness of the public schools must be more apparent and more appreciated by the parents and the taxpayers than ever before; that teaching must become a real profession based on adequate preparation, rather than merely a temporary job. Further, our board members and citizens in general have accepted the schedule in its full meaning that only teachers well prepared and trained should be employed. Poorly prepared resident girls no longer apply for positions in the schools, and high school graduates who wish to teach enter the normal schools or colleges as soon as possible to prepare themselves, while the non-resident teacher is readily employed without question, especially if in any way better fitted for the position. In fact the school board, since the adoption of this schedule, has more fully than ever transferred the responsibility of selecting and appointing all principals, teachers and other employees, subject, of course, to its final approval.

Another result, not yet largely realized, that we expect to follow, is an improved social status of the teacher. For, after all, this is something for which the teacher himself is most responsible, as it is dependent so largely on personal qualities enhanced by education, training, culture, maturity and experience, and a salary schedule based and administered on this principle should improve the status by improving the quality.

Finally we believe the thorough establishment of this or any good salary schedule in the thought and affections of a community will go far to maintain itself—that is, to help stave off the pressure that is inevitable from the opponents of continued higher taxation even for the purpose of public education.

The Kind of a Teacher I Want for My Boy

By a Father.

I want my boy's teacher to be a man's man or a woman's woman. If a woman, I want her character to be such that he can regard her with the same veneration which he bestows upon his mother. If a man, I want him to be one of my boy's heroes. Furthermore, I want him to be justly entitled to any hero-worship he may receive. I know of few sadder sights than that of a teacher possessing qualities that command the love of boys without the moral fiber to use his leadership for their uplift.

I have in mind a teacher who won the admiration of the boys in our community as no other man we have ever had in our school. He himself was a brilliant scholar and a wonderful athlete. In addition he had the ability to communicate his athletic lore to others. As a result during the few years he was in our school our athletic teams were such as have never been equaled before or since. You can imagine how the boys worshiped him. I remember after one football victory, I heard little Jimmy, who ran a shoe-shining stand after school hours, call to him, "Hey, Prof., please come over here. I want to shine your shoes for nothing." Jimmy was not alone in his feelings. Any boy in school felt honored to be able to perform any service, however menial, for their teacher.

Unfortunately the boys' idol had feet of clay. He smoked cigarettes incessantly; every minute that he was not on duty. He would play cards up in the Commercial Club room until two, three o'clock in the morning. It was whispered around that he got drunk occasionally. He was seen in the company of young women whose reputation in town was not altogether savory. He had little sympathy with the best traditions of our town; he was never seen in church. If he had not been such a likeable chap, and if his personality had not been as strong as it was, it would not have made much difference. As it was, I think that the pastor of our church was right when he called him the worst moral influence to which our boys had ever been subjected.

I want my boy to have a teacher who will make him work; make him work, not as the ox labors because he is driven by fear of the lash of punishment, but as an Edison strives because he is stirred by love of his job. That means I want an enthusiastic teacher, for it is only the unusual child who can become eager to work out a task assigned by a teacher who was counting the minutes until four o'clock. As I look back over my own youth, I am sure that the teachers who did the most for me were the teachers who loved to teach, and were enthusiastic about the subjects they were teaching. There was Mary Ann Smith, who was the chemistry teacher in our junior year, for instance. There were other teachers in our school, better looking than was Miss Smith, and there were teachers with more experience by far, but there were no others who showed the ardent interest in their work that she did in her chemistry. We students put as much time on our chemistry that year as we did on all our other subjects together, and by the end of the first semester every boy in the class had decided that he was going to be a chemist some day. It is true that there are not many of us who persevered in our ambitions and are chemists today, but nevertheless we did experience that year the joy of doing tasks not because we failed to perform them, but because they seemed worth performing.

I want my boy's teacher to be a just teacher. we should be compelled to stay after school if I do not want him to be the kind of teacher who promotes the children of members of the school board when he would not promote the children of less influential parents under the same conditions. I do not want any teacher to grant any child of mine favors to which he is not entitled because I know of few greater wrongs which a teacher can do him. For the same reason I do not want any favoritism shown toward my neighbor's child.

I want my boy's teacher to be young. His hair may be gray, and he may have sixty candles on his birthday cake, but he must look upon life through the optimistic eyes of seventeen. I want him to go to school parties and enjoy them as much as do the youngsters; I want him to get excited in the last half of a sharply-contested basket ball game. Teachers who disapprove of youth and want to get out of its presence are not the teachers I want my boy to have.

I want my boy's teacher to have a sense of humor. Every day, incidents occur in any schoolroom which are either potential comedies or needless tragedies. Bashful Johnny Jones collides with little Betty Ames; Johnny tries to cover his embarrassment with a nervous little laugh, and a gentle snicker overspreads the room. Miss Grump, the teacher in charge, has many estimable qualities, but a sense of humor is not one of them; she checks the rising tide of mirth with a caustic curtain lecture that sends the class back to work sullen and discontented. A similar incident occurs in Miss Cox's room across the corridor, and Miss Cox's own ringing laugh is the signal for a brief outburst of gaiety that refreshes and invigorates every little body in the room. The diversion instead of hindering the work of the class has increased its efficiency. Many a strict, rigorous teacher keeps the work of her class at a high pitch by relieving the tension with a laugh at the right time.

If I seem to be demanding a great deal of my boy's teacher, remember I am also surrendering a great deal to him. My most cherished hopes for the future rest to an almost awe-inspiring extent with him to whom I entrust the training of my boy for the great portion of the day.

The Supreme Court and Compulsory Education

Charles Carroll, Providence, R. I.*

Two recent decisions, one by the Supreme Court of the United States[1] and the other by the District Court of the United States[2] sitting at Portland, Oregon, both unfavorable to types of educational legislation recently enacted by American commonwealths, suggest an examination of the constitutionality of compulsory education laws generally, with a view to determining the jurisdiction of the state with reference to the education of children. Both types of laws condemned by the federal courts appear to have originated in public opinion following the World War, awakened by discovery and disclosure of alleged educational conditions, particularly illiteracy in English, scarcely comforting when viewed in the perspective of national welfare as indicated by substantial adherence to the principles of a common language and a minimum education common to all.

The Nebraska Case

Nebraska and other middle-western states undertook to banish education in other languages than English from elementary schools, both public and private; and the Supreme Court upheld an inherent right in the parent of the child to provide for his education in any language chosen by the parent. It has been rather unfortunate that the language used by the Supreme Court in this decision has been construed by some as indicating a parental right to educate an American child wholly in another language than English, excluding English. It is possible to rest such construction only on the basis of giving effect to what would be, from the nature of the question strictly before the court for decision, merely *obiter dictum*. The denial of jurisdiction in the state does not operate to construct or extend a parental right. The Supreme Court has denied the jurisdiction of the state to banish foreign languages; it does not follow that the state has no jurisdiction to require English. The parental right to provide instruction, say in Volapuk, is not established by the Supreme Court decision, as a right to insist that the child shall be instructed exclusively in Volapuk, to the exclusion of the common language of the people. Yet only such construction would justify the position of those who, jubilant at an apparent victory in the Nebraska case, deny a state jurisdiction of any sort in the field of language, or those who, downcast at apparent failure, are pessimistic. The really significant question, may the state establish a minimum language requirement in education, remains untouched by the Supreme Court decision.

The Oregon decision involves the validity of an amendment to the constitution of Oregon, adopted by popular referendum, requiring attendance exclusively at public elementary schools, which would have the effect reasonably of closing private elementary schools for want of pupils and rendering private education by parent or tutor illegal. In a test case before the Supreme Court of Oregon decision was favorable to the amendment; no other decision might be anticipated in view of the oath of the *state* judges to support and give effect to the state constitution. The District Court of the United States has ruled otherwise, and it is generally believed that when an appeal from this court is taken to the Supreme Court of the United States, the decision of the District Court will be sustained. The effect of the decision is to establish beyond question the legality of private instruction, paralleling public instruction, and to indicate rather definite limitations upon state jurisdiction in enforcing attendance on public instruction.

Compulsory Attendance Laws

Compulsory attendance laws uniformly have been sustained as constitutional in instances in which the law has left choice of school or means of education to the parent.[3] The decisions are by state courts, no appeal having been taken to the Supreme Court of the United States. It is, however, entirely consistent with the federal court decisions already discussed that the Supreme Court of the United States would sustain a state compulsory attendance law reasonably asserting and establishing state jurisdiction in education and at the same time reasonably protecting parental rights which appear to have been infringed in Nebraska and Oregon.[4] It is well that the relative jurisdiction of state and the relative rights of parents should be evaluated, and that questions so pregnant with significance for national welfare and unity should be settled.

The Nebraska and Oregon laws rest substantially upon the assertion of notions of sovereignty strengthened in the stress of war-time activity, however inconsistent these appear with criticism of pangermanic political philosophy, and the ideals of individual liberty proclaimed in the Declaration of Independence and written into our fundamental national laws in the constitution of the United States. Out of the stronger national policy evolved in the recent conflict has come a more vigorous ideal of federal and state initiative and right, too frequently expressed in general formulae resembling "the state's right to educate," "the children of the state," "the state's children," etc. America has scarcely avoided the contradiction of might and right, in the drastic nature of post-war legislation. On the contrary, there has been, in opposition to the emphasis upon state right, particularly in education, a strong development of a notion of parental right overshadowing state right. The evidence of the conflict appears in the Nebraska and Oregon legislation, and the recourse to litigation to determine right. Both philosophies are seriously erroneous, and rest upon an incorrect use and interpretation of the word "right."

The Child's Right to Education

Neither state nor parent has a right with reference to the education of the child; in both instances the alleged right is an obligation. The only right in education is the child's right. When the questions at issue are approached from this perspective, the reconciliation of what appears to be contradictory theses is simple, and the principles that may guide a state in framing legislation that will insure the minimum education common to all, and essential to public welfare, are readily discovered.

Every child has a right to an education. The child's right to education is as clear and as indisputable as the child's right to food, clothing, shelter, and the necessities of life. Education is a necessity. Without it the child is poorly prepared to take his place as an effective member of society. Without it he is seriously handicapped economically, politically, socially; the effective measure of his civic rights is diminished, and in the competition with his fellows which is part of our organization of civilization he lags hopelessly behind. One of the clearest enunciations of the principle of child right appears in a petition for public schools addressed to the Rhode Island General Assembly in 1799 by the Providence Association of Mechanics and Manufacturers: "Numbers in every part of the state are deprived of a privilege which it is the *common right of every child to enjoy.*" In consequence thereof the Rhode Island General Assembly in 1800 enacted the first American state-wide universal free public school law.

Primarily the obligation to provide food, clothing, shelter and other necessities for his child rests upon the parent. This obligation is clearly recognized with reference to the common necessities of life, and in principle is the basis of sound compulsory attendance legislation that visits penalties upon the parent who neglects to educate his child. Just as, however, the parent in fulfilling his obligation to feed, clothe and shelter his child, may exercise a reasonable discretion in choosing the food (within the limitation of sufficiency), and of designing clothing (within the limitations of sufficiency and decency), and of selecting a place of residence and habitation (again within limits), the parent has a reasonable discretion in fulfilling his obligation with reference to the education of his child. The Nebraska case holds that the parent may provide education in languages besides the common language. The Oregon case holds that the parent may choose the school to which he will send his child. What other decisions could reasonably be expected in free America? What other decisions could be made consistently with American notions that government exists primarily for the promotion of the welfare of the people, and that life, liberty and the pursuit of happiness are inalienable rights? Where, then, does the right or obligation of the state enter into education?

The Child as Potential Citizen

If a parent fails to fulfil his obligation to provide food, clothing, shelter, and other necessities for his child, the state is obligated to enforce the child's right. The child is a citizen potentially, but a citizen without effective power to enforce his right; hence the state is bound to care for the child's right. The state enforces the child's right with respect to common necessities, first by bringing pressure to bear upon the parent. Education, however, is in the nature of a public utility, and in common experience the school has developed as a joint or mutual enterprise for supplying economically for numbers a need that could be supplied individually to less advantage. The public school was established in America when it was clearly recognized that private schools, however frequent in number and however generous in provision, failed to provide education for all the children of all the people. Compulsory attendance may not be made effective without the public schools. The state could not attain the position of ability to enforce child right and parental obligation until the public school was established. And here the Oregon decision is exactly in point. The state may enforce attendance upon public instruction only when the parent has not made reasonable provision otherwise to fulfil his parental obligation.

There remains the questions of what education and how much education has a child a right to. And the answer here clearly is in terms of the answer to the same questions with reference to other life necessities. The child

*The author of this paper is Professor of Law and Government at the Rhode Island College of Education and Professor of School Law and Administration at the Rhode Island State College. He occupies the office of Secretary of the State Board of Education and is a member of the Rhode Island Bar.—Editor.

[1]Nebraska vs. Meyer, and other cases involving the jurisdiction of a state with reference to prescribing the language of instruction.

[2]Case involving the constitutionality of an amendment to the Constitution of Oregon requiring attendance exclusively in public elementary schools.

[3]Yale vs. School District, 59 Conn. 489; Com. vs. Roberts, 159 Mass. 372; Jackson vs. Mason, 145 Mich. 338; State vs. Hall, 74 N. H. 61; State vs. McCaffrey, 69 Vt. 85; State vs. McDonald, 25 Wash. 122, etc.

[4]The court in the Oregon case says, "The right of the state to establish as its school policy compulsory education within its boundaries is conceded."

is entitled to sufficient food, clothing, shelter and other necessities to sustain life comfortably and with a view to his position in life. The definition of "sufficiency" is to be found established clearly with reference to necessities in cases involving parental obligation for support, and an adult's obligation on contracts for necessities made during infancy. The same general principles apply in education. The child's education must be sufficient in content to assure him a proper position as a citizen. Most American states have attempted to define a minimum (necessary) education in terms of years of compulsory attendance on instruction, or in terms of content in school grade accomplishment, or in minimum requirements for employment in years of childhood. There appears to be little reason for doubting that these laws, with the possibility of rare instances in which zeal has overstepped the bounds of caution, are valid and constitutional, as they tend, not so much to restrict the individual, as to promote his freedom and happiness.

No education measures up to any reasonable standard of sufficiency that does not include the common language. Every American child has a right to the English language as part of his education. An American child, who is not taught the English language, is deprived of his right to a sufficient education. In America a parent who does not provide education in English for his child is not fulfilling his obligation to educate the child. A state that fails to enforce an American child's right to education in the English language is evading its own obligation and responsibility, and is derelict as a member of the sisterhood of states that make the American Union.

Positive Legislation Needed

How may a state, in view of the Nebraska and Oregon decisions, fulfil its obligation to the children living within its borders? The answer is to be found in positive, progressive legislation rather than in the negative types of legislation condemned by the federal courts. Nebraska and other states were seriously interfering with reasonable parental prerogatives, and child rights as well, in forbidding, practically, instruction in languages other than English and attendance on other than public instruction. The English standard should appear in a positive English requirement; the common education standard should appear in positive content requirements. The English standard may, for instance, appear in a requirement that the common branches in all schools, public and private, shall be taught in English. The content standard may appear in provision for the approval by public authority of private schools and private instruction, for purposes of attendance, if the private instruction is substantially equivalent in content and efficiency to the instruction in the public schools for which it is offered as a substitute. This type of legislation would leave to the parent both the choice of school and the privilege of supplementing the minimum education presented for all by other subjects, including other languages. Private schools may be held, to public standards by means of reasonable reports, reasonable similarity of records, and reasonable provision for visitation and inspection as the bases for approval. The one element necessary to maintain the substantial harmony and good feeling that is an essential characteristic of wholesome relations between public and private institutions working in the field is uncompromisingly just and equitable administration. It will be found in experience that public and private schools may work together harmoniously in the field of educating all the children of all the people, and that public ideals may be realized on the basis of good faith and "trusting the other fellow," which is, after all, nothing but the basic American principle of toleration.

It is worthy of note that Rhode Island for more than forty years has had the type of laws herein suggested in operation, and that under these laws both public schools and private schools have prospered, and that the cause of public education has continually progressed on the basis of toleration and mutual understanding.

The Student Wage Earner

Isabel Underwood Blake, La Jolla, Calif.

"Before we listen to Mrs. Calkins' report on money making occupations for high school students," said the pessimistic member of the school board, "I want to point out to the board the danger of introducing to the students a spirit of money getting. The desire for money and its pursuit may well interfere with the pursuit of study."

Two or three members nodded acceptance of this idea, none more promptly, however, than Mrs. Calkins, who was to present the report.

"The desire, or the need, for money, is already interfering with the pursuit of study," said she reasonably. "Two of our students have dropped from the senior class to go to work, four who would have been juniors, and five from the sophomore class. Of eighth grade graduates, four have found full time 'jobs.' For everyone who does throw over school and gets himself a 'job,' there is a greater number of those who will sooner or later be led to.

"I have called on the employers, and at the homes, of these former students. I find that four of them are unwilling to continue their education in school. Five are contributing to the support of their families, and six are merely earning spending money, buying some of their clothes and so on. Four of these latter are girls. Silk stockings, ice cream and candy, movies"—she shrugged her shoulders. "And the idea is growing. A considerable number of students now enrolled are due to drop out."

Mrs. Calkins paused and the first objector put up an arresting hand.

"Would you combat this craze for spending money, extra clothes and what not, by providing opportunity for earning it?"

Mrs. Calkins nodded. "Yes," she said frankly. "It is hard for a student who has once dropped out of school and gone to work, to come back. But give to anyone an opportunity to work after school hours and earn money: those who tire of it will have had the lesson, and will be still in school, instead of adrift. Those who want the money for foolish luxuries will at least have earned it, and if at school and at work, will have the less time to indulge their folly. Those who really need the money should be helped to earn it, instead of being deprived of their high school education."

A second objector made herself heard.

"Students working after school can't make as much as those doing full time work. What, then, about the ones whose families need the money?"

Mrs. Calkins was ready for the objection.

"I have convinced the parents of every such family that these young people may now be earning as much as they would at the start after completing the high school course, but that none have the ability to increase their earnings as much or as rapidly as they would after four years of high school training. For the sake of their children's education, and for greater returns in the future, the families are willing to do with less help now, if part time work can be put in the students' way. And for every one who comes back to school, fewer will leave it."

The objecting member ever so slightly shifted ground.

"Granting that some students need or want part time work," he began his second attack, "and granting that the school will serve its own ends in helping them to it, where—where, I ask, are you going to find work, for which a totally inexperienced, very young person, putting in a couple of afternoon hours, can be paid?"

Mrs. Calkins met this obstacle with even more assurance than the first. She glanced at her notes.

"We have at our disposal eleven regular jobs, for high school students, afternoons from three to five, and Saturday mornings, and a variety of occasional employments, ten in all, which can be undertaken by the students.

"To put the thing on a working basis, I suggest this plan, which can be modified or amplified:

"In the high school assembly, to explain to the students that the board and executives will help any who need or want it, to find paying part time work, so that their school education may be continued.

"To have every student who is interested, register, and to 'card catalog' him according to the various kinds of work at our disposal, which he is capable of doing.

"To publish in the local papers a sympathetic account of the movement, and ask that those who wish to employ students, telephone to the high school building during the noon recess.

"To have one registered student within reach of the telephone each day during the noon recess. They can take turns, a few days at a time, doing this for each other's and their own benefit. Consulting the card catalog they can assign a student to a job, and see that he knows of it and is going. If a student should fail to appear after undertaking the work, or should fail to do it acceptably, he would have, of course, to be blacklisted.

"To establish at the outset, altering them if it proved necessary, standard charges for work."

The speaker waited for discussion and it freely followed. A salient point was the question, voiced by all, "What are the regular jobs, and the occasional employments, that the children could qualify for?"

Again Mrs. Calkins took up her notes.

"Two dry goods stores and two drug stores will use a boy with a bicycle, every afternoon and Saturday mornings to deliver purchases. One grocery store will give a boy a place on the afternoon delivery wagon, and the dairy will use two 'steady' boys for evening milk. The evening paper says its delivery routes are at present taken, but it can use a boy for the last three-quarters of an hour in the press room, before the paper goes out. Dr. James, a dentist, would like to have a girl make out his statements once a month. The Chocolate Shop wants extra help Saturday evenings after the 'movies.'

"So much for the regular places. Five stores will take the older high school boys and girls as extra clerks in the pre-Christmas rush, after the school holidays begin. So many mothers want nice girls to stay with their children afternoons and evenings, that many of those places could be classified as regular. Two people want neat typewriting done. Several want cars washed. Further, for the boys, there is all the grass cutting, leaf raking, snow shoveling, ash emptying, and window washing, that their own mothers can spare them for. More constructive than that, there is a good deal of gardening in season, for the few capable of it."

(Concluded on Page 140)

Lessons from Massachusetts School Finance

I—State Policies

Fletcher Harper Swift, University of Minnesota.

That the educational situation faced by Massachusetts is one of the most difficult in the United States is easily evident. Nearly 29 per cent of her population is foreign-born, and she has the heaviest per capita debt of any state among the thirty for which the United States Census Bureau was able to secure data in 1920. Despite the fact that she ranks second in foreign-born population and first in per capita debt, only seventeen states in the Union in the year 1920 spent more per child enrolled, only seven surpassed her in total expenditure for schools on each $1,000 of estimated wealth, only three paid higher average salaries, and only three secured a larger per cent of daily attendance of children enrolled. In only six was the average school year longer, and in only one was the average number of days attended by each pupil enrolled greater.

Readiness to Experiment

One of the first lessons which we may learn from Massachusetts is the necessity of a careful study of policies of school finance and of experimentation. Massachusetts, like California, has shown herself not only sensitive to the inadequacy of policies which were sufficient twenty years ago, but willing to experiment with new policies and new methods. Largely as the outcome of intelligent leadership and of willingness to modify her policies, Massachusetts has evolved a system of school finance, which, whatever its defects, is vastly superior to that employed in the majority of our states. No more striking example of this readiness to experiment can be found than is contained in the history of the methods of apportioning state school funds. Most of our states have been content to continue distributing their school moneys year after year by unchanging methods long ago recognized as antiquated, unjust and disastrous. Massachusetts, prior to 1904, had changed her method of apportioning the income of her permanent common school fund, known as the Massachusetts school fund, no less than thirteen times. In 1919, the special commission on education included among the several bills it formulated one relative to the distribution of the Massachusetts school fund designed to bring about a still further improvement in the distribution of state school moneys. An intensive study of more than one-fourth the states of the Union made by the writer has revealed the fact that Massachusetts is the only one in this group of states which, in apportioning state aid, takes into consideration the ability and the effort of the receiving unit, for she alone was found to take into consideration the assessed valuation and the rate of the school tax of the receiving unit.

State Assumes Large Degree of Responsibility

A second lesson which we may learn from Massachusetts is the importance of placing the final responsibility for the provision of educational facilities upon the state. We have long been accustomed to think of New England as the birthplace and cradle of local autonomy. The more carefully one studies the Massachusetts school system the more and more convinced will he become that in school matters at least local autonomy is largely a myth. In many of our western, middle western, and southern states, where the district system prevails, it is entirely possible for large numbers of children to be left without any school facilities whatsoever. In one of the wealthier middle western states studied by the writer in 1922, one district having a valuation of $129,000 levied no school tax and maintained no school in spite of the fact that there were twenty-seven pupils living in this district. Moreover, this district made no definite arrangements for the transportation of its pupils to other districts. Three districts in another county of the same state levied no school tax, maintained no school and furnished no transportation, although they had respectively twenty, eight and five pupils residing within their limits. Two districts in this county were reported to open their schools alternate years to avoid consolidation with some other district. Another district in the same county had had no school since 1915.

In one of the poorest southern states there were in 1920, one hundred and twenty districts, and in 1921, seventy-eight districts which voted no school tax and presumably provided no school. In this same state all public schools in the second largest city of the state were maintained only as tuition schools for an entire year, and the schools of many other cities annually cease to be free schools after a few months of maintenance. Were the example of Massachusetts followed there would not be a single state in the Union where such conditions could exist. The entire state of Massachusetts is divided among 38 cities and 317 towns.[1]

State Law Prevents Tax Shirking

A third lesson which we may learn from Massachusetts is that which concerns compulsory local taxation. As already pointed out, in many of our states it is entirely possible for indifferent local units to refrain from levying any school tax. In Massachusetts, the state not only sets up definite and liberal facilities to be placed within the reach of every school child, but the state herself assumes responsibility for seeing that a compulsory school tax, sufficient to provide these facilities is levied. The Massachusetts law is careful not to name any definite tax rate. On the contrary, it names the facilities which must be furnished and then provides that a rate shall be levied sufficient to maintain all facilities required by law. But the state does not stop here: it provides heavy cash penalties to be imposed on any town or city which shall fail to provide the facilities required by law, and the proceeds of such penalties shall be used for providing the same. The law reads:

"Towns shall raise by taxation the money necessary for the support of public schools as required by this chapter. For refusal or neglect so to do, a town shall forfeit to the county an amount equal to twice the highest sum ever before voted for the support of schools in the town, or for refusal or neglect to choose a school committee, or to comply for one year with Section 68 (this section requires every town to maintain and support a number of properly furnished schoolhouses), it shall forfeit not less than $500 nor more than $1,000. Three-fourths of any forfeiture so recovered shall be paid by the County Treasurer to the school committee, if any, otherwise to the selectmen of the delinquent town, to be expended for the support of the schools thereof as if regularly appropriated by the town thereof."

State Shoulders Increasing Share of the School Burden

Massachusetts belongs to that small number of states which has frankly asserted that the increasing burdens of school support must be met by the state assuming an increasing proportion of the burden of school costs. In the case of Massachusetts this policy is of special interest as perhaps no other state pursued so long and so completely the policy of placing almost the entire burden of school support upon the local community. In 1915 Alabama, Mississippi, Montana, Texas and Kentucky each derived more than fifty per cent of their common school revenues from state funds. In that same year, Massachusetts derived less than three per cent of her school revenues from state funds. Of great interest to the student of school finance is Massachusetts' recent modification of her century-long policy of refusing to allow the state anything more than a negligible part in providing school revenues, and a frank recognition that in the future the state must furnish a much larger share of school moneys than in the past. This recognition was given practical expression in 1919 by the passage of a law setting aside a portion of the proceeds of the state income tax as an annual current fund to be known as the general school fund. As a result of this legislation, whereas prior to 1919 the state had seldom furnished more than two or three per cent of the total public school revenues, and often less; in 1920 she furnished no less than 12.3 per cent.

State Income Tax

The preceding paragraph noted that in 1919 Massachusetts provided that a portion of the state income tax (adopted in 1916) should be employed as school revenue. In view of the fact that possible new sources of revenue is one of the most important questions confronting every state in the Union today, Massachusetts' adoption of the income tax as a source of school revenue makes her system of school finance an object of nation-wide interest. Not only is this true, but the income tax as levied in Massachusetts has been highly commended by specialists in this field. Concerning the Massachusetts income tax, Comstock writes: "It is nevertheless clear that such a tax as that of Massachusetts, which yields, from specified incomes only, an amount approximately equal to one-third of that collected by the federal government, is a satisfactory measure; while such a state as Mississippi, which, from a tax upon all individual incomes, gains only about one and one-half per cent of the amount collected through federal channels, is justified in regarding the measure as one which, on financial grounds, is not worth keeping on the statute books."[2]

One of the most significant lessons to be drawn at this point is the sharp line which Massachusetts draws between property taxed by the state for the sake of providing school revenues, and property taxed by the local community. Like California, Massachusetts reserves to local units the right to tax real and personal property, but whereas California derives the major portion of her state school revenues from corporation taxes,[3] Massachusetts derives hers from the state income tax.

It should be noted further that the law providing for the general school fund is careful not to name any fixed amount to be taken from the proceeds of the state income tax. To do so would have resulted in prorating the quotas to be granted from year to year for various projects subsidized by the state. Instead of following any such policy as this, Massachusetts names the projects and the amounts to

[1] Many special laws have been enacted in Massachusetts to apply to cities, but all laws governing towns apply also to cities. Consequently, when in the succeeding paragraphs laws are cited affecting towns, it will be understood that they apply equally to cities.

[2] Alzada Comstock, Fiscal Aspects of State Income Taxes, American Economics Review, 10:258 to 271.

[3] F. H. Swift, Studies in Public School Finance, The West, p. 26.

be provided for each from the general school fund, and then provides that there shall be set aside annually from the proceeds of the state income tax an amount sufficient to finance these projects, which amount shall be available without further legislative action.

Small Permanent School Fund

The majority of our states have received from the Federal government vast grants of school lands out of which have been created permanent endowments for the state system of common schools. Massachusetts, as one of the thirteen original states, received no land grant from the Federal government, and has been obliged to depend almost entirely upon her own resources. Had she, however, in the early days of her history believed in the state playing a large part in educational policies, she would have undoubtedly followed the example of Connecticut, New York, and certain other states, and have attempted to establish a large state permanent common school fund with which to endow her schools. Her ownership of the domain later organized into the state of Maine would have made it an easy matter for her to have done this. However, so strong was her conviction that the state should assume little or no responsibility, either for the direction or for the support of schools, that she refrained from providing for any state permanent school fund whatsoever until 1834, and from the beginning until now legal limits have been established which the principal must not exceed. The law of 1834 limited the principal to $1,000,000. The law in force at the present time places the limit at $5,000,000. Needless to say, from the standpoint of the per cent of total school revenue provided, the Massachusetts school fund is of distinctly minor importance. In 1920 and in 1921 the permanent school fund of Massachusetts contributed approximately six-tenths of one per cent of the total revenues devoted to public schools. Among those 34 states in the Union whose state permanent common school funds may be regarded as genuinely productive, only three states derived a smaller per cent of their total school receipts from their state permanent fund.

How Massachusetts Apportions State Aid

Scarcely less important than the provision of adequate revenues is the apportionment of such revenue in accordance with methods which may be characterized as scientific, sound, equitable, and democratic. Regarding no problem in school finance is there greater need of information. In no phase of school support has progress been more slow and the practices most commonly employed more unscientific and less necessary.

A recent study showed that in no less than 37 of our 48 states, school funds are distributed all, or in part, on the basis of school population, despite the fact that the unsoundness of this basis and the disastrous results produced thereby have been pointed out again and again. One of the most important purposes of state aid is to even out inequalities which arise among school units as the result of the differences in wealth, that is, differences in ability to provide money for schools. A bad method of distributing state aid instead of evening out such inequalities, creates, exaggerates, and perpetuates them. Many states in the Union, by adopting a scientific method of distributing state aid, could bring about an immeasurable improvement in educational conditions without increasing their amount of state aid a single dollar.

A moment's thought will show that any method which makes the number of pupils the sole or even the main factor in determining the amount of money to be granted to a community is unsound; particularly when applied to rural communities. A rural district which provides one teacher for forty pupils receives (where the pupil basis of apportioning school moneys is employed) twice as much as a rural district which provides one teacher for twenty pupils despite the fact that the cost of maintaining a school in each of these districts will be very nearly the same provided they employ equally good teachers, provide school terms of equal length and furnish equally good facilities. Each district will be obliged to maintain a schoolhouse. The cost of up-keep, insurance, repairs, and other expenses will be approximately the same and will be scarcely influenced by the number of children in the school.

Massachusetts, like California, in distributing state aid recognizes that the all-important factor in determining school costs is the number of teachers employed and the salaries paid to them. In addition to this, the Massachusetts method undertakes to recognize two other very essential factors ignored by the great majority of our states, namely: the local unit's ability to provide school revenues as represented by its valuation, and the effort it puts forth as represented by its tax rate.

The general school fund derived from the state income tax is the largest and most important state fund distributed by Massachusetts. In fact, out of every $100 provided by the state in 1921, $83.40 came from the general school fund. This fund is paid out solely as reimbursement toward the salaries of teachers, superintendents, principals, supervisors, and other local school officers. The reimbursement is the same in amount whether paid toward the salary of a teacher, superintendent, or supervisor, provided the training, the experience, and the salary paid by the town are the same.

The general school fund is distributed in two installments. From the first installment are paid what for convenience we may call *ordinary reimbursements* which go to every city and town without respect to valuation; from the second installment are paid what may be called *supplementary reimbursements* to towns whose valuation per pupil in net average membership[4] is less than $4,500. It may be well to note at this point that Massachusetts' cities and towns in 1921 varied in valuation per pupil in net average membership from $2,000 to $77,000.

In the case of ordinary reimbursements, the amount paid toward the salary of any school officer depends upon his training, number of years of experience, and the salary paid by the town. In the case of supplementary reimbursements, the amount depends upon the per pupil valuation of the town and varies from $100 per teacher for towns whose valuation per pupil lies between $4,000 and $4,500 to $350 per teacher for towns whose valuation per pupil is less than $2,000. It has been already pointed out that the general school fund is not a fixed amount but rather a sum set aside annually from the proceeds of the state income tax sufficient to meet the obligations incurred against the general school fund. It will be seen that such a policy precludes any necessity of ever prorating the income of this fund but that on the contrary there is guaranteed to every town and city the full sum to which it is entitled by law.

Some Defects

The Massachusetts system of distributing ordinary reimbursements is based upon the principle that the state should guarantee a definite amount toward the salary of every public school superintendent, supervisor, principal, and teacher in every town and city in the state regardless of differences in wealth of the communities employing the same and that the state grant should be determined solely by three factors: the salaries paid, the professional preparation, and the years of experience of school officers concerned. The higher the salary and the more thorough the preparation, the larger is the state subsidy. The aim here is evident and laudable, namely: to stimulate communities to employ well-trained teachers, but any system which ignores differences in wealth of the communities aided is destined to fail to equalize school burdens and educational opportunities. That this is the case in Massachusetts will be clearly shown by a study of data which, however, cannot be presented here.[5] As a rule it will be the poorer towns which will engage the less trained and the lower salaried teachers, while the wealthy communities will pay the higher salaries and employ the better-trained teachers. Yet Massachusetts pays reimbursement of $200 for every teacher employed at $950, or more per year, while for every teacher employed at $750 per year the reimbursement is only $100. In other words, the wealthier towns will receive the greater aid. Such a system cannot fail to perpetuate the condition which exists not only in Massachusetts but throughout the United States and which consigns the children in rural schools to less experienced, less prepared, and lower-salaried teachers.

Methods of Distributing the Permanent School Fund

Unsoundness of Total Valuation as a Basis for Apportioning State Aid

The permanent common school fund known as the *Massachusetts school fund* was created in 1834, whereas the general school fund was created in 1919. Due perhaps to its earlier origin, the method employed in distributing the income of the Massachusetts school fund despite many revisions is not as satisfactory as the method employed in distributing the general school fund. The income of the Massachusetts school fund is limited to towns whose total valuation is less than $2,500,000. It would be difficult to find a more interesting or more convincing proof of the unsoundness of total valuation as a basis for distributing state aid than the results of this method as found in Massachusetts. A study of the distribution of this fund in 1921 revealed the following facts: 11 towns having a valuation of less than $4,000 per pupil, 22 having a valuation of less than $5,000 per pupil, 62 having a valuation of less than $6,000 per pupil receive no aid whatsoever from this fund, whereas certain towns having valuations as high as from $10,000 to $17,000 per pupil were aided from this fund.

Despite these defects a study of the method in which this fund is distributed will show its superiority over the methods employed by the majority of our states. Indeed, it may be said without any hesitation, that despite the small amount of revenue which is derived from this fund, one of the most valuable lessons to be learned from a study of state school finance in Massachusetts is how a relatively small and apparently unimportant fund may be so managed as to exert an influence out of all proportion to the size of the revenue it furnishes. As in the case of the general school fund, the state names certain projects or situations toward the relief of which the revenue is to be devoted. As in the former case, so in the present, towns are protected against any injustice or embarrassment which might arise should the income of the fund prove insufficient to meet the claims of the towns; for the law provides that if the income from the Massachusetts school fund shall be insufficient to meet such obligations, this income shall be supplemented from the proceeds of the state income tax to the amount required.

[4] For an explanation of this term, see, F. H. Swift, Studies in Public School Finance, The East, p. 61.

[5] F. H. Swift, Studies in Public School Finance, The East, pp. 79-82.

The effectiveness of the Massachusetts school fund is realized not only through limiting its income to towns of low valuation but by making the amount which any town receives depend further upon (1) the town's total valuation, (2) the tax rate necessary to be levied by the town to raise an amount equal to the difference between the total sum which the town receives from the state general school fund and the total of certain specified school costs incurred by the town. This difference is called the "assured minimum." The details of these policies cannot be presented here.[6] It may be noted, however, that the reimbursement from the state varies roughly from one-half to one-third of the assured minimum.

State Special Appropriations

It is impossible to speak here otherwise than briefly regarding the several types of state special appropriations provided by Massachusetts. Most important are those devoted to the teachers' retirement system, superintendency unions, vocational education, and high schools.

Massachusetts established her teachers' retirement system by a law passed in 1913 to provide annuities and pensions for teachers, superintendents, principals, and supervisors. The state makes three classes of appropriations for this project: (1) an annual appropriation to defray the expense of administering the pension system, (2) appropriations for pensions, (3) appropriations to towns and cities for pensions paid to retiring teachers in certain special cases.

Every town in Massachusetts must employ a superintendent of its own or unite with other towns in forming what is known as a superintendency union to employ a union superintendent. The law establishes no maximum salary for a union superintendent, but provides a minimum salary scale varying from $2,200 for the first year of service to $2,500 for the fourth year of service. The state reimburses superintendency unions for two-thirds of the following amounts: (1) the salary paid to the superintendent not exceeding $2,500, (2) traveling expenses not exceeding $400 per year.

In many states vocational education is given in the ordinary common schools. In Massachusetts it is provided chiefly through separate institutions and classes restricted to those who have either entered upon or at least have chosen a definite calling. The result is what may be called a dual system of secondary vocational education composed of (1) vocational classes and departments in ordinary type of public high schools, (2) vocational schools and classes, independent of, or separate from, the public schools.

Departments for vocational agriculture are the only type of vocational training which may be provided in ordinary high schools. In the case of agricultural departments in high schools, the state grants a reimbursement equal to two-thirds of the salaries of the instructors therein. In the case of independent agricultural, industrial, or household arts schools, the state reimburses the towns to the extent of one-half of the net maintenance of the same. "Net maintenance sum" is defined by law as "the total sum raised by taxation and expended, less the amount of tuition claims, paid or not, and receipts from the labor of pupils, and sale of products."

Any city or town may, and every city or town in which in any year two hundred or more minors under sixteen are employed not less than six hours per day by authority of employment certificates, must maintain continuation schools or courses. The state reimburses towns and cities maintaining continuation schools, or courses, which have been approved by the state

[6]A detailed statement of the method of distributing this fund may be found in F. H. Swift, "Studies in Public School Finance—The East," pp. 63-66.

J. O. ENGLEMAN,
Superintendent of Schools,
Terre Haute, Indiana.

department, one-half the sum raised by local taxation and expended for their maintenance.

Few, if any, states in the Union surpass Massachusetts in zeal for high schools. A study by the writer of more than one-fourth of the states revealed the fact that Massachusetts is the only state in this group which makes the establishment of a high school compulsory. Not only must every town of 500 families or more maintain a high school, but cities of 50,000 population are required on petition to maintain an evening high school.

Through her general school fund and through her permanent school fund Massachusetts provides liberal reimbursements to all towns and cities of the state. The state makes no distinction between elementary schools and high schools. In addition to such aid, the state grants special high school aid to towns of less than 500 families. To such towns maintaining high schools at their own option, the state makes salary grants; to towns not maintaining high schools the state makes grants for tuition and transportation of pupils. In both cases, however, the state recognizes a principle overlooked in the majority of our states, and limits its aid to the more needy communities, and evidence shows that the application of this principle is made to a much further degree than in the case of the general school fund or the Massachusetts school fund. In the present instance, no reimbursement is made to any town whose average valuation per pupil exceeds the state average. To each high school town of less than 500 families, the state grants $250 annually for a principal and for each full time teacher, provided, the total grant shall not exceed $1,250.

A town of less than 500 families not maintaining a four year high school is required by law to pay the tuition of any pupil residing therein and who, with the approval of the town school committee, attends an approved high school in another town. When necessary, the town shall also provide for the transportation of such a pupil. In lieu of transportation, towns are authorized to pay the board of such a pupil. Massachusetts is careful to protect the individual pupil against the indifference or negligence of the local school board. If the school committee refuses to issue the necessary certificate, application may be made to the State Department of Education which may issue a certificate which shall have the same force and effect as if issued by the town school committee.

The state reimbursements to towns paying the costs of tuition, transportation, or board of high school pupils are liberal, varying in amount from the entire sum expended to three-fourths or one-half. Reimbursements for tuition are based upon the town's valuation. Reimbursements for transportation and board are based upon the rate of local taxation for schools.

Among the many advanced provisions which Massachusetts has made designed to put high school facilities within the reach of her children, none is more remarkable than that which provides state reimbursements for the cost of teaching at home, in towns of less than 500 families not maintaining four year high schools, pupils who by reason of physical disability are unable to attend high school in another town. The state reimburses such towns under the same conditions, and to the same amount as for tuition and for transportation. Under this act, it is possible for towns to receive not less than $148 per year for each such pupil.

Conclusion

The present article has endeavored to present some of the major features of the Massachusetts system of school finance. In so doing, attention has been confined almost entirely to state policies. In the article which follows attention will be given to local funds and local policies, the results of the present system and certain needed reforms.

ENGLEMAN GOES TO TERRE HAUTE

J. O. Engleman, since 1922 Director of Field Service for the National Education Association, has recently been elected to the superintendency at Terre Haute, Ind., succeeding J. M. Tilley.

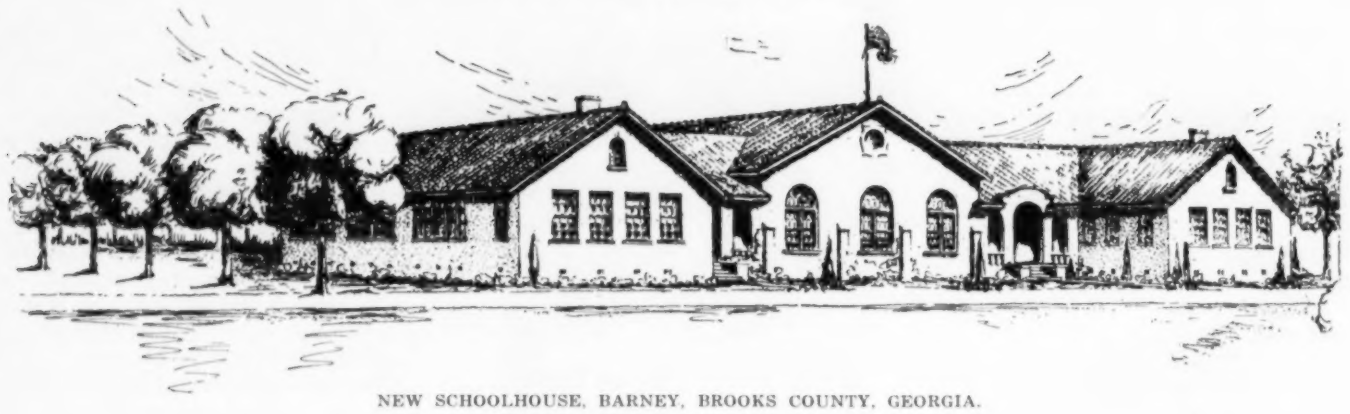
Mr. Engleman was born in Jeffersonville, Ind., 49 years ago. His first license to teach was obtained at the early age of 16, and he spent fifteen years in teaching and supervision in the Hoosier state. He has served as high school principal and for the last nine years was a city superintendent of schools. For two years he was principal of the training school department of the Indiana State Normal School. From this position he was called to La Crosse, Wis., to become head of the department of education of the State Normal School. After four years he resigned to become state institute conductor, later resigning to accept the superintendency at Decatur, Ill. After eight years in Decatur, he resigned to accept the superintendency at Joliet. After filling his new position a little more than a year he was released by the board so that he might take up the field work for the National Education Association.

Mr. Engleman has adequate training as well as broad experience fitting him for his work as an educator. He is a graduate of the Indiana Normal School, of Indiana University and possesses a master's degree given by the University of Chicago, and an honorary degree of Doctor of Laws given by James Millikin University.

In addition to long and successful teaching and administrative experience, Mr. Engleman has had extensive experience covering many states of the Middle West in giving addresses for state and local teachers' associations and parent-teachers' associations. He is a regular contributor to the leading school journals of the country. During the last term of the summer quarter of 1922 and 1923 he was an instructor at Chicago University and during the present summer session he will conduct a course at the Ohio State University.

—Approximately 40,000 children received milk at the mid-morning recess in 47 cities and 41 villages of New York State during 1923, according to a recent report.

—To stimulate interest of children in health education almost three-fourths of the schools in Yonkers, N. Y., offer health challenge cups to classes showing the most improvement in health. Each school makes its own plans for the contest, in which all grades compete, under the supervision of an active and versatile medical director. An average gain in weight of one pound each for all children taking advantage of the milk fund was reported last year in a school where the number of underweight children decreased from 92 to 42 in nine months.



NEW SCHOOLHOUSE, BARNEY, BROOKS COUNTY, GEORGIA.

School Building Evolution in Georgia

Elizabeth G. Holt, State Supervisor of School Buildings for Georgia.

Until 1919, most of the school buildings throughout the State of Georgia were erected either without any specially drawn plan, or else by plans drawn without regard for many of the features that are now considered essential to the physical and educational welfare of those who are to occupy them.

During the past four years we have been attempting to help to solve the problem by giving free plans to those communities desiring them. These plans were drawn with special consideration for correct standards of lighting, ventilation, educational arrangement, safety for human life, future growth of the school, and for beauty and refinement of appearance. The specifications called for materials and workmanship appropriate for the use and purpose of the buildings. There is no doubt that through this means considerable development has been made.

However, we have now come to the conclusion that for two main reasons this course should be abandoned for a better. The first of these two reasons is that we have found that it is practically impossible to determine upon a plan for school buildings that would be entirely suitable for all places. Each place should have a special plan to meet local conditions of topography and educational requirements, with consideration, also, for appropriateness of architectural style.

The second of these two reasons is that results, almost without exception, show that the buildings, even though erected in general by these well-designed plans, are, nevertheless, handicapped by many errors. This is so because it has been impossible for us to keep in close enough touch with all of these buildings for which we have furnished the plans to see to it that they were correctly followed. Constant and expert supervision of the construction of a schoolhouse (probably the most important of all public buildings) is as important as is the correct plan and specifications.

The better course that we think should now be followed with all school buildings is to have an architect, carefully selected and working in cooperation with the building supervisor of the state department of education and with the local school authorities, to prepare the plans and specifications, let the contract, and supervise the construction of each building according to the regulations outlined by the American Institute of Architects, as is customary with all public buildings of importance.

Disadvantages of a State School Architect

The idea has been entertained by some that it would be a matter of great economy to the state to employ a state school architect to draw the plans for all schoolhouses. This, however, would not be practical for a number of reasons, some of which are as follows:

1. The supervision of the construction of the buildings is as important as is the correct plan, and it would be impossible for *one* architect to attend to all of this.

2. To employ a sufficient number of superior architects (and certainly no other should be employed) would require a far greater appropriation made up of far greater individual salaries and expense accounts than any legislature would probably ever consent to make.

3. It would be a most unprogressive step at this stage to sacrifice the development of school building plans to the genius, or lack of genius, of any one architect.

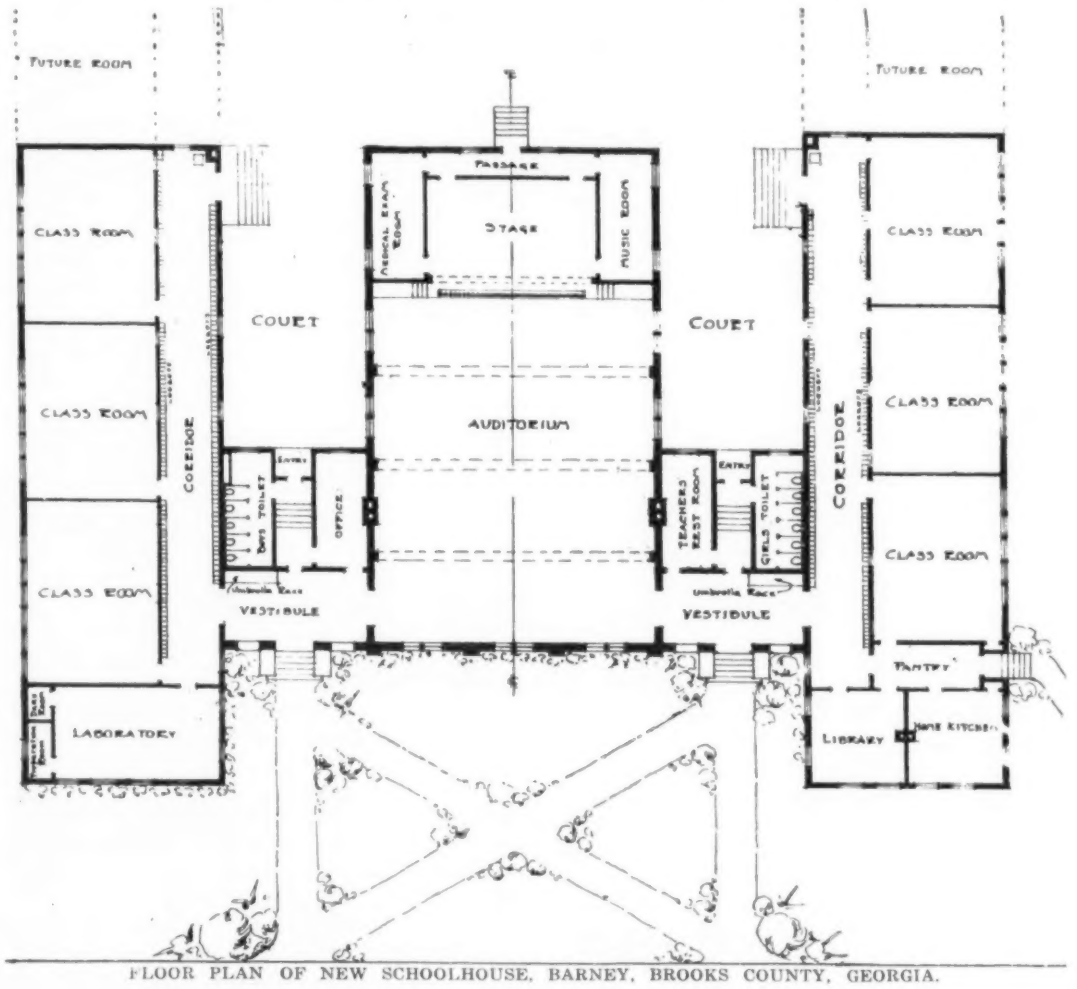
The probability is that far more money would be wasted in the state on school buildings handicapped by all of the limitations of a system with a state school architect than would be spent in fees to various architects working under the regulations of the American Institute of Architects in cooperation with the school authorities. Invariably the *right sort of architect* saves for his client far more than his actual fee by safeguarding against errors that would result without such supervision either from the ignorance or the dishonesty of those erecting the buildings. Building after building over the state, erected without such supervision, demonstrate the truth of the foregoing statement. We know of no single exception.

Importance of Selection of an Architect

Obviously, then, the selection of the architect is a matter of supreme importance.

Though we have a law requiring all architects to register, and fixing a minimum list of qualifications, it has not been in force long enough to cull out the unfit. At present no architect has had sufficient experience, nor has given sufficient study to the subject of school buildings in all of its phases, to make it safe to leave the planning of these buildings entirely to his judgment. As evidence of this, throughout the state, in places large and small, there are a great number of schoolhouses planned by architects advertising themselves as school building specialists, which abound in serious errors. This danger can be avoided only through cooperation between the architect and the specialist of the state department of education and the local school authorities. Already the best architects and the most progressive communities are glad to avail themselves of this cooperation, though there is no law really compelling it.

(Continued on Page 135)



FLOOR PLAN OF NEW SCHOOLHOUSE, BARNEY, BROOKS COUNTY, GEORGIA.

A Study of School Salaries in Four States

E. C. Denny, Assistant Professor, Department of Education, Iowa State Teachers' College.

About this time of year school boards and others, more or less directly concerned with school affairs, find themselves interested in the problems connected with school salaries. The following questions and tables are designed to show something of the present tendencies. The data in the tables are taken from the respective state directories compiled from reports furnished by the different cities to the offices of state superintendents. The study has been confined largely to cities of a group ranging in population from 4,000 to 20,000 with few exceptions. Certain cities within this range had to be excluded because complete data could not be had for both years, 1921-22 and 1923-24, from the directories. In case a city reported a part time teacher, this teacher and her salary were not counted in determining the average. The column "years in position" includes the present year.

Questions

1. What has been the status of school salaries during the last three years in Iowa, Kansas, Missouri and Nebraska?
2. Have the salaries of superintendents increased?
3. Have the salaries of high school principals increased?
4. Have the salaries of high school teachers increased?
5. Have the higher salaried states decreased the salaries of teachers?
6. Have the higher salaried cities decreased salaries of teachers?
7. Is the size of salary dependent on the size of city?
8. Do the higher salaried superintendents and principals stay longer in the same city than the lower salaried ones do?
9. Does the woman high school principal cause the low average salary for this position in Iowa?
10. How do the states compare with respect to the number of women high school principals?
11. In the cities which changed superintendent or principal during the last two years, what was the effect of the change on the salary of the position?
12. Is a city justified in paying a large salary to superintendent or principal while paying an average or low salary to teachers?
13. Is a state justified in putting two high schools into the same classification that differ as much as $400 in the average salary of teachers?

Discussion of Questions

1. What has been the status of school salaries during the last three years in Iowa, Kansas, Missouri and Nebraska?

a. All four of the states show an increase in the average for the executive positions. For the superintendents, Kansas shows an increase from $3,741 to $3,873; Nebraska from $3,744 to $3,797; Iowa from $3,437 to $3,570; and Missouri from $3,118 to $3,399. For principals the increases are: Kansas from $2,727 to $2,791; Nebraska from $2,662 to $2,665; Iowa from $2,307 to $2,342; and Missouri from $2,075 to $2,420.

b. In the teaching positions Nebraska shows the most marked decrease, from $1,664 to $1,584; Kansas shows a slight decrease, from $1,586 to $1,576; Iowa shows a slight increase, from $1,499 to $1,513; and Missouri shows the most marked increase, from $1,382 to $1,426.

I. SALARIES IN 28 KANSAS CITIES

Cities in Kansas	Census 1920	Superintendent 1921-22 *	Superintendent 1921-22 Salary	Superintendent 1923-24 *	Superintendent 1923-24 Salary	H. S. Principal 1921-22 *	H. S. Principal 1921-22 Salary	H. S. Principal 1923-24 *	H. S. Principal 1923-24 Salary	H. S. Teachers 1921 Salary	H. S. Teachers 1923 Salary
Abilene	4,900	15	$3,600	17	$3,600	1	$2,600	1	$2,600	$1,508	$1,490
Augusta	4,200	5	3,500	7	3,500	4	2,500	6	2,500	1,733	1,646
Chanute	10,300	11	4,000	1	3,600	3	2,700	1	2,750	1,497	1,485
Cherryvale	4,700	2	3,000	4	3,200	1	2,250	1	2,250	1,525	1,558
Coffeyville	13,500	3	4,200	5	5,500	3	3,000	5	3,300	1,667	1,734
Concordia	4,700	1	3,000	3	3,400	2	2,400	1	2,400	1,541	1,568
Dodge City	5,100	4	3,000	1	3,000	2	2,700	1	2,500	1,531	1,548
El Dorado	11,000	7	4,000	9	4,000	2	3,000	1	3,000	1,690	1,530
Emporia	11,300	25	4,000	27	4,000	4	3,000	6	3,200	1,714	1,767
Fort Scott	10,700	1	3,600	3	3,800	1	2,800	3	3,000	1,589	1,318
Galena	4,700	2	2,500	1	2,500	1	1,500	2	1,700	1,287	1,265
Horton	4,000	7	3,000	9	3,000	†4	2,000	1	2,100	1,476	1,377
Independence	11,900	20	5,500	22	6,000	23	3,780	1	4,000	1,584	1,575
Iola	8,500	1	3,500	3	3,750	1	2,650	1	2,500	1,386	1,430
Junction City	7,500	4	3,800	6	4,000	7	2,800	9	2,900	1,701	1,585
Lawrence	12,500	2	3,800	4	4,300	29	3,000	31	3,000	1,722	1,839
Leavenworth	16,900	3	4,200	5	5,000	2	3,270	4	3,500	1,485	1,527
McPherson	4,600	7	3,000	9	3,100	2	2,100	4	2,300	1,477	1,421
Manhattan	8,000	7	3,600	9	3,600	2	2,700	4	2,700	1,590	1,577
Newton	9,800	10	3,600	1	3,600	3	3,750	1	2,800	1,663	1,690
Osawatomie	4,800	4	2,750	2	2,500	1	2,000	3	2,000	1,507	1,485
Ottawa	9,000	6	3,500	8	4,000	13	2,750	15	3,000	1,607	1,655
Parsons	16,000	1	4,500	2	4,200	1	3,500	1	3,250	1,725	1,791
Pittsburg	18,000	7	4,000	9	4,500	11	3,000	13	3,250	1,828	1,767
Pratt	5,200	3	3,500	5	3,600	4	2,700	1	2,700	1,414	1,703
Salina	15,100	9	5,500	11	5,500	1	3,000	3	3,250	1,803	1,530
Wellington	7,000	3	3,600	1	3,200	1	2,400	1	2,200	1,485	1,576
Winfield	8,000	9	5,000	2	4,500	6	3,500	2	3,500	1,682	1,701
Average		6.5	3,741	6.6	3,873	4.8	2,727	4.4	2,791	1,586	1,576

†Woman
*Years in position

II. SALARIES IN 27 IOWA CITIES

Cities in Iowa	Census 1920	Superintendent 1921-22 *	Superintendent 1921-22 Salary	Superintendent 1923-24 *	Superintendent 1923-24 Salary	H. S. Principal 1921-22 *	H. S. Principal 1921-22 Salary	H. S. Principal 1923-24 *	H. S. Principal 1923-24 Salary	H. S. Teachers 1921 Salary	H. S. Teachers 1923 Salary
Ames	6,300	4	$3,600	6	$3,600	2	$2,500	4	$2,500	$1,477	$1,471
Atlantic	5,300	1	3,000	1	3,000	†1	1,800	†3	2,000	1,505	1,585
Boone	12,500	4	3,600	6	4,500	2	2,600	4	3,000	1,516	1,526
Carroll	4,300	1	3,300	3	3,300	1	2,300	2	2,300	1,384	1,500
Cedar Falls	6,300	5	3,200	7	3,200	3	2,300	2	2,100	1,514	1,504
Chariton	5,200	3	3,600	5	3,600	2	2,250	2	2,200	1,349	1,345
Charles City	7,400	5	3,200	2	4,200	1	2,200	1	2,500	1,564	1,542
Creston	8,000	4	3,600	6	3,600	6	2,250	8	2,280	1,501	1,492
Decorah	4,000	7	3,200	9	3,300	7	2,500	9	2,600	1,506	1,499
Eagle Grove	4,400	4	3,300	2	3,150	†6	1,850	1	2,200	1,437	1,490
Estherville	4,700	10	3,600	2	3,400	†1	2,100	1	2,100	1,564	1,497
Fairfield	6,000	4	3,600	6	3,600	†2	2,500	†4	2,500	1,454	1,629
Ft. Madison	12,000	3	4,300	5	4,500	3	2,600	5	2,700	1,525	1,602
Iowa City	11,300	3	4,000	5	4,500	8	3,600	10	3,600	1,628	1,638
Keokuk	14,400	2	3,200	4	4,200	2	2,650	4	3,000	1,604	1,587
Le Mars	4,700	2	3,300	2	3,500	2	2,400	2	2,500	1,617	1,547
Lyons	6,000	3	3,000	5	3,300	2	2,375	†2	2,000	1,464	1,483
Marion	4,100	2	3,000	2	3,100	†3	2,000	†5	2,050	1,350	1,387
Missouri Valley	4,000	4	3,200	2	3,000	†4	1,900	†2	1,710	1,591	1,443
Mt. Pleasant	4,000	15	3,000	17	3,000	2	2,000	†2	1,700	1,461	1,472
Perry	5,600	5	3,200	2	3,000	†29	2,500	†2	2,400	1,516	1,491
Red Oak	5,600	9	4,000	11	4,000	†3	2,000	†5	2,250	1,563	1,638
Shenandoah	5,300	4	3,300	6	3,300	†4	2,100	†6	2,100	1,592	1,659
Spencer	4,600	4	3,300	6	3,300	†4	2,100	†2	1,900	1,435	1,460
Washington	4,700	3	3,750	5	4,000	†7	2,400	†9	2,600	1,488	1,537
Webster City	5,700	2	3,450	4	3,300	3	2,400	2	2,200	1,489	1,421
Iowa Falls	4,000	5	3,000	2	3,200	4	2,000	6	2,250	1,386	1,413
Average		4.4	3,437	4.9	3,570	4.2	2,307	3.9	2,342	1,499	1,513

†Woman
*Years in position

III. SALARIES IN 29 MISSOURI CITIES

Cities in Missouri	Census 1920	Superintendent 1921-22 *	Superintendent 1921-22 Salary	Superintendent 1923-24 *	Superintendent 1923-24 Salary	H. S. Principal 1921-22 *	H. S. Principal 1921-22 Salary	H. S. Principal 1923-24 *	H. S. Principal 1923-24 Salary	H. S. Teachers 1921 Salary	H. S. Teachers 1923 Salary
Booneville	4,700	9	$3,000	11	$3,600	1	$2,200	3	$3,000	$1,429	$1,356
Brookfield	6,300	2	3,180	4	3,460	1	2,000	3	2,200	1,129	1,163
Butler	2,700	3	2,300	5	2,700	2	2,250	2	1,575	1,250	1,299
Cape Girardeau	10,200	9	3,600	11	4,000	3	2,750	5	3,000	1,400	1,538
Carthage	10,100	5	3,850	7	4,000	4	2,640	1	2,400	1,304	1,311
Chillicothe	6,800	1	3,000	3	3,200	2	2,400	1	2,400	1,423	1,563
Clayton	3,000	11	3,800	1	4,200	3	3,000	2	3,000	1,796	1,818
Clinton	5,100	20	2,880	22	2,880	4	1,620	2	1,800	1,315	1,325
Columbia	10,400	2	3,600	4	4,000	2	2,400	4	2,400	1,286	1,378
De Soto	5,000	1	2,500	1	3,000	3	1,620	2	1,800	1,271	1,261
Excelsior	4,200	1	3,200	3	3,400	1	2,400	1	2,200	1,573	1,620
Hannibal	19,300	15	3,300	17	3,600	5	2,160	7	2,400	1,338	1,387
Independence	11,700	1	3,600	3	3,600	1	3,000	3	3,000	1,279	1,303
Jefferson City	14,500	3	3,400	5	3,700	8	2,300	1	2,500	1,352	1,430
Kirksville	7,200	10	3,000	12	3,000	2	2,400	1	2,700	1,535	1,510
Kirkwood	4,400	7	4,250	9	4,250	6	3,000	8	3,200	1,921	1,929
Liberty	3,100	1	2,750	3	3,300	†2	1,500	1	2,400	1,266	1,307
Marshall	5,200	5	3,600	7	3,600	1	2,400	1	2,600	1,454	1,477
Maryville	4,700	2	2,400	4	3,000	2	1,620	2	2,400	1,278	1,400
Mexico	6,000	14	3,000	16	3,400	1	2,100	3	2,400	1,363	1,415
Moberly	12,800	2	3,300	4	3,600	1	2,800	3	3,000	1,361	1,369
Neosho	4,000	5	2,750	2	2,500	2	1,800	4	2,000	1,030	1,106
Nevada	7,100	2	2,760	2	3,300	†2	2,200	2	2,365	1,415	1,523
Poplar Bluff	8,000	4	3,000	6	3,300	†1	1,350	1	2,000	1,381	1,406
Richmond	4,400	4	3,100	2	2,880	2	2,250	1	2,250	1,367	1,450
St. Charles	8,500	1	2,600	3	3,200	1	2,400	3	2,700	1,540	1,533
Sedalia	21,100	2	4,200	4	4,260	†19	2,200	†21	2,500	1,393	1,470
Trenton	7,000	3	3,000	5	3,300	†2	1,800	1	2,500	1,395	1,421
Warrensburg	4,800	13	2,400	15	2,400	2	1,500	4	1,500	1,186	1,194
Average		5.5	3,118	6.6	3,399	3.0	2,075	3.2	2,720	1,382	1,426

†Woman
*Years in position

These changes still leave Nebraska first, Kansas second, Iowa third, and Missouri lowest, when ranked on average salary to teachers. Taking a general average for all cities in the four states we note an increase of $8.

2. Have the salaries of superintendents increased?

Yes, when the average is considered. The increases range in average from $281 in the case of Missouri to $53 in the case of Nebraska.

3. Have the salaries of high school principals increased?

Yes, when the average is considered. The increases range in average from $345 in the case of Missouri to $3 in the case of Nebraska.

4. Have the salaries of high school teachers increased?

If we consider the average we answer thus: Yes, in Missouri and Iowa; No, in Kansas and Nebraska. The variation here shows an increase of $44 for Missouri and $14 for Iowa, and a decrease of $10 for Kansas and $80 for Nebraska.

5. Have the higher salaried states decreased the salaries of teachers?

Yes, when the average is considered. Also the two low salaried states show increases. This has operated to put all four of these neighbor states more nearly on the same footing with respect to teachers' salaries. At present we note a difference of $158 between Nebraska, the highest, and Missouri, the lowest. In 1921-22 the difference was $282.

6. Have the higher salaried cities decreased the salaries of teachers?

A direct answer cannot safely be given to this question. In Nebraska we find that all cities decreased salaries of teachers with two exceptions: McCook, which was relatively high, and Plattsmouth, which was relatively low. In Missouri we find that only four of the twenty-nine cities decreased teachers' salaries, and that these four cities were neither high nor low salaried cities in 1921-22. We might say in general that the cities tend to follow the trend in the state. If the state shows a decrease, a city is quite likely to show a decrease, regardless of what its salary for teachers was in 1921-22. If the state shows an increase, a city is quite likely to show an increase, regardless of a high or low salary in 1921-22. Missouri seems to be following the policy of increasing salaries of teachers while Nebraska seems to be following an opposite policy.

7. Is the size of salary dependent on the size of city?

Only in a very general way. If the ten largest cities are taken the average salaries for teachers at present is $1,560; if the ten smallest cities are taken the average salary is $1,412. There is undoubtedly some positive correlation between size of city and size of salary paid teachers. However, there are many notable exceptions. For example, compare McCook, one of the smaller cities, with Hannibal, one of the larger cities. It is seen that the former outpays the latter by $321. Likewise compare Lawrence, Kansas, with Sedalia, Mo.; York, Nebr., with Keokuk, Iowa. Or consider the salary paid a superintendent in Scotts Bluff, Nebr., Independence, Kansas, Keokuk, Iowa, and Sedalia, Missouri.

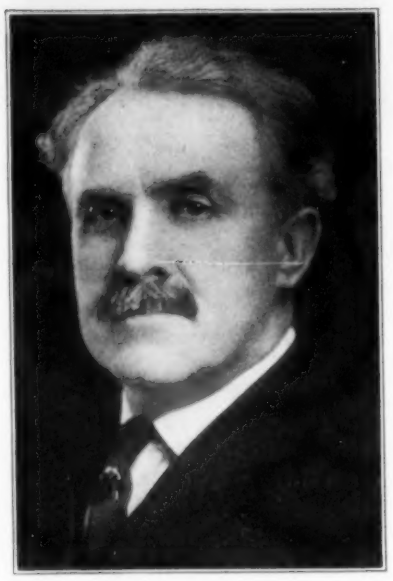
8. Do the higher salaried superintendents and principals stay longer in the same city than the lower salaried ones do?

Yes; there are twelve cities paying superintendents' salaries of $4,500 or more and 25 cities paying $3,200 or less. The higher salaried group show an average service of 6.7 years and the lower salaried group show an average service of five years. The principals in this first group show an average service of 5.1 years and in the second group they show an average of 2.4 years.

9. Does the woman high school principal cause the low average salary for this position in Iowa?

We find that the men principals in Iowa have an average salary of $2,502, while the women principals average $2,105. We might note at this point that even when considering the average for men only, Iowa is well below both Kansas and Nebraska. Missouri pays the least at present, but it is apparent that she is making a bid for better high school principals, if her increase of $345 in two years of time may be taken as an index.

10. How do the states compare with respect to the number of women high school principals?



WILLIAM J. BOGAN,
Assistant Superintendent of Schools,
Chicago, Ill.

Mr. Bogan, who became first assistant superintendent of the Chicago schools on April 15th, has been widely known throughout the United States as principal of the Lane Technical High School, the largest school of its type in Chicago.

Mr. Bogan was born in Michigan 54 years ago and has had his entire professional career as an educator in the Chicago schools. He has been particularly active in promoting secondary education and vocational work in secondary schools.

Our table shows that Iowa had eleven of the eighteen in 1921-22, and has eleven of the thirteen at present. The other three states show a marked tendency to employ men for this position. Probably during the years 1917-19 more women than usual were employed in this type of work. It looks as if at present Iowa is following a policy all her own with respect to employing women as high school principals.

11. In the cities which changed superintendent or principal during the last two years, what was the effect of the change on the salary of the position?

It is impossible to answer this question accurately from the tables because they do not show the year 1922-23. Therefore, if it is shown that a superintendent or principal is now serving his second year, it is not shown what his salary was for his first year. But by comparing 1921-22 with 1923-24 in all cities where changes are apparent, it is seen that there are fifteen superintendents' positions paying less and ten paying more at present than in 1921-22. Similarly it is found that twenty principalships pay less and nineteen pay more. Hence if we are justified in making any statement, it is that there has been a slight tendency to pay a new superintendent or principal somewhat less than was being paid his predecessor.

12. Is a city justified in paying a large salary to superintendent or principal while paying an average or low salary to teachers?

IV. SALARIES IN 16 NEBRASKA CITIES

Cities In Nebraska	Census 1920	Superintendent 1921-22 *	Salary	Superintendent 1923-24 *	Salary	H. S. Principal 1921-22 *	Salary	H. S. Principal 1923-24 *	Salary	H. S. Teachers 1921 Salary	H. S. Teachers 1923 Salary
Alliance	4,600	12	$4,000	1	$3,300	4	$2,900	6	$3,000	$1,527	$1,500
Beatrice	9,700	5	4,000	2	4,000	4	2,800	6	3,000	1,786	1,706
Columbus	5,400	4	3,600	2	3,500	5	2,700	2	2,500	1,713	1,681
Fairbury	5,500	7	3,400	2	3,100	3	2,600	5	2,600	1,746	1,615
Falls City	4,900	6	3,500	8	3,500	4	2,500	6	2,500	1,501	1,428
Fremont	9,600	14	4,000	16	4,000	4	2,800	6	2,800	1,626	1,500
Grand Island	13,900	40	3,500	2	4,500	1	2,700	1	3,000	1,678	1,630
Hastings	11,600	3	4,500	5	4,500	3	3,500	5	3,500	1,810	1,682
Kearney	7,700	1	3,500	3	3,500	3	2,600	5	2,700	1,581	1,532
McCook	4,300	4	4,000	6	4,000	†4	2,500	†6	2,400	1,692	1,708
Nebraska City	6,300	5	3,800	2	3,300	1	2,200	1	2,000	1,590	1,421
Norfolk	8,600	2	3,400	4	3,750	2	2,700	2	2,600	1,769	1,634
Plattsmouth	4,200	3	3,200	5	3,500	1	2,100	3	2,200	1,411	1,420
Scottsbluff	6,900	1	5,000	3	5,500	3	2,750	5	3,000	1,700	1,660
University Place	4,100	4	3,000	2	3,200	2	2,500	2	2,350	1,673	1,456
York	5,400	4	3,500	2	3,600	2	2,750	2	2,500	1,848	1,764
Average		7.2	3,744	4.1	3.797	2.9	2,662	3.9	2,665	1,664	1,584

†Woman
*Years in position

V. SUMMARY FOR THE FOUR STATES

	Superintendent 1921-22 *	Salary	Superintendent 1923-24 *	Salary	H. S. Principal 1921-22 *	Salary	H. S. Principal 1923-24 *	Salary	H. S. Teachers 1921 Salary	H. S. Teachers 1923 Salary
Kansas	6.5	3.741	6.6	3,873	4.8	2,727	4.4	2,791	1,586	1,576
Nebraska	7.2	3,744	4.1	3,797	2.9	2,662	3.9	2,665	1,664	1,584
Iowa	4.4	3,437	4.9	3,570	4.2	2,307	3.9	2,342	1,499	1,513
Missouri	5.5	3,118	6.6	3,399	3.0	2,075	3.2	2,420	1,382	1,426
General Average	5.9	3,510	5.5	3,660	3,7	2,443	3.8	2,554	1,533	1,525

*Years in position

VI. WOMEN HIGH SCHOOL PRINCIPALS

	1921-22	1923-24	1921-22	1923-24
Kansas	1	0	$2,000	
Nebraska	1	1	2,500	$2,400
Iowa	11	11	2,105	2,110
Missouri	5	1	1,810	2,500
Total	18	13		

This question, of course, cannot be answered from any of the tables and is raised here only because a few cases are found. One needs to consider several factors in giving an answer to such a question. For example, when a town or city experiences rapid growth many school problems of perplexing difficulty arise, and these problems fall chiefly on the executives.

13. Is a state justified in putting two high schools into the same classification when the schools differ as much as $400 in the average salary paid teachers?

Of course, this question cannot be answered from tables and is raised here only because the tables show such variations. It would seem that in order for two high schools to be given the same rating they ought to employ teaching staffs of somewhat near the same ability, and it seems reasonable that in the long run, as in most any other business, the higher salaried schools are going to attract and hold the better teachers. Some state authorities insist that in order for a high school to maintain standing in a high classification the school must follow a policy of providing salaries sufficient to secure and retain well qualified teachers. Many school boards are finding it wise to adopt some form of salary schedule, such as that of Racine, Wisconsin, for which see the SCHOOL BOARD JOURNAL for January, 1924, page 116.

14. If it be desired to study a particular group of cities of more nearly the same size for the sake of comparing a given city with others of practically the same population, an arrangement similar to the following can be made:

TABLE VII. Showing How Decorah, Iowa, Compares in Teachers' Salaries with Cities of Population 4,000 to 4,400

City	H. S. Teachers' Salaries
Kirkwood, Mo.	$1.929
McCook, Nebr.	1.708
Augusta, Kan.	1.646
Excelsior, Mo.	1.620
Carroll, Ia.	1.500
DECORAH, IOWA	1.499
Eagle Grove, Ia.	1.490
Mt. Pleasant, Ia.	1.472
University Place, Nebr.	1.456
Richmond, Mo.	1.450
Missouri Valley, Ia.	1.443
Plattsmouth, Nebr.	1.420
Iowa Falls, Ia.	1.413
Marion, Ia	1.387
Horton, Kan.	1.377
Neosho, Mo.	1.106

FALSE NOTIONS ABOUT THE SUPPLY OF SCHOOLMEN

C. S. Chappllear

I was applying for the superintendency of the schools in a certain city. The president of the school board was an attorney. He turned, and drew from his desk a package of twenty or more letters, remarking, "Look here, during the past two weeks, I have received more than a score of applications for the position you seek.

I inquired, "How many of your applications come from men at present employed in school work?" He took the trouble to oblige me, and found, that without a single exception, each application came from a man filling a responsible school position.

This board member had overlooked two very obvious facts: First, that each of the positions, which his applicants were now filling, would offer employment to a man, for the future years; and, second, that each applicant had, on an average, applied at perhaps twenty other cities. A board should not feel flattered, or their sense of responsibility lessening, because of the fact that they receive a great many applications. It does not mean that there are from twenty to 75 men for each position. In fact, a board will be fortunate to find one unquestionably reliable man, available for the position they have to offer.

Interior Marble in School Buildings

John Stephen Sewell, Birmingham, Ala.

A number of other matters must take precedence over that of interior finish, in the design of a school building. But when a community has arrived at the point where really permanent and substantial buildings are not only justified, but financially possible, the question of interior finish takes its place among the major issues to be settled. It bears very directly upon aesthetic values, cleanliness, both visible and sanitary, upon cost of upkeep, and upon ultimate economy, with first cost included as one of the factors.

Among available materials, although it is not the one of minimum first cost, marble is entitled to serious consideration. Unless first cost must take precedence over ultimate economy, marble should be used in certain places, because it is at once, not only the most pleasing material available, but, in the long run, the most useful.

Among rocks available in quantity sufficient for building purposes, marble alone, in beauty of texture and coloring, ranks next to the precious stones. Men of all ages have used it as the material in which to express their highest aspirations and their noblest conceptions. The history of the human race would be incomplete in some of its most vital parts, without that which has been embodied and transmitted in marble.

If current geological theories are correct, the marbles of the world are among the oldest of the rocks that are directly used by man; yet, they owe their origin, in the main, to primitive forms of life which are believed to have flourished and disappeared before man appeared upon the scene. Here is a subject for a sermon or a thesis upon the existence of a conscious purpose within or behind nature, and upon the significance of life. Iron ore and coal, which are of organic origin, and also widely used, we destroy as such, in using them; but marble we use as it is; from every piece of marble in a building, one hundred million years or more, look out upon our transient activities. Could we but read the record, and make it plain, our children would need little other education!

From the standpoint of earth history—from the standpoint of human achievement—for the romance, adventure, ideals and aspirations embodied in it—marble is entitled to a place in the surroundings of the children of the race.

But it is not alone nor principally as a medium of higher education and culture that it is entitled to consideration.

Marble occurs in an endless variety of color, tone, and texture. Sometimes it has very uniform ground mass, with little variation; sometimes it presents a mixture of rich colors which is overpowering in its splendor. No matter what scheme of treatment the architect may have in mind, there are marbles which fit into it and which will give to it its most perfect expression. No matter what the kind of marble—whether it is white or black, or gray or buff—whether it is so uniform and neutral in color value as to gain the trade name of "monotone"—or whether it is a riot of the richest colors—in all of its grades and kinds, it presents that indefinable variation which gives to each piece an individuality yet leaves it true to one type. Since the days of Rome, men have endeavored to imitate it, but study of the imitation only enhances the value of the original. To this day, the advocates of most of the substitutes claim that they are as "good as marble"; recently one concern advertises its product as "better than marble"; but one and all, they thereby proclaim that marble is the standard of comparison, the ideal to be attained. As a medium of architectural expression, marble remains unsurpassed.

Utilitarian Qualities

In school buildings, marble must stand the test of severe usage and must qualify from the standpoints of utility and economy. Otherwise, its use in schools would and should be a rare occurrence.

The most obvious uses for marble as part of the interior finish of school buildings are for floors, partitions and wainscot in toilet rooms and floors, base and wainscot in corridors and other more public places of common use. There are good arguments for use elsewhere, but the more obvious uses will first receive attention. Any material which is attractive in itself and which will stand the test in toilet rooms is manifestly suitable for the less trying conditions in corridors; so the discussion will apply chiefly to marble in toilet rooms.

In many cases, at least, the toilets in schools receive very severe usage; probably as severe as in other sort of building. The material selected for floors, wall finish and partitions must be impervious, easily cleaned, strong enough to resist very appreciable stresses, permanent and, if possible, attractive—even beautiful.

It is believed that if, for all materials commonly used in toilet rooms in schools, a careful weighing of advantages and disadvantages be made, the balance will be found in favor of marble, in comparison with any other material.

Marble is permanent; the marbles of the world have lain for untold ages exposed to the weather; they slowly waste away, as do all other rocks. But those which are reasonably homogeneous and pure never contain within themselves any unstable material nor anything which would be subject to spontaneous disintegration. Under such conditions as obtain in any part of a school building, marble will outlast the building. In the ruins of Roman villas, the interior marble is found still in place, with its original beauty and finish unimpaired.

Among the marbles in the market, there are some so richly and variously colored, that their use in large masses and for such purposes as toilets and ordinary corridors, would be ruled out as a matter of taste, apart from the fact that they are very expensive. They are properly reserved for those cases where richness and splendor are appropriate.

There are other marbles which the trade calls "unsound"; i. e., nature has left them so broken up with natural joints that even in pieces of moderate size, they must be patched and stuck together and the joints filled and finished with wax. Notwithstanding this, many of these marbles are so beautiful in texture and coloring that they are widely used. But they should not be used in the toilets and corridors of school buildings.

There are marbles which are "sound," but which have veining and clouding caused by the presence of some foreign mineral, less dense and hard and less permanent than the marble itself, in such proportions that the veined and clouded parts are less durable than the marble in which they are embedded; such marbles should not be used at all, or with great caution, in toilets. But those which have found and maintained a place in the market, are entirely suitable for corridors, unless their color value, as often happens, is a little too overpowering.

Varieties of Usable Marbles

Ruling out all of the marbles above described —all of which owe their position mainly to their decorative value—there remain many marbles which are sound, homogeneous, permanent and beautiful, and which have, par excellence, all the qualities to be desired for use in toilets and corridors, for floor finish, partitions and wainscot.

All of these marbles are included among those that are known as white, gray or bluish gray, and monotones. The latter are called buff, gray-buff, or pink or pinkish-gray, or chocolate colored. The word "monotone" no more accurately describes them than it does the white and bluish-gray marbles. But its special use in this connection has the sanction of a trade custom.

The white and bluish-gray marbles are generally found associated in the same deposits, the one kind often changing into the other in the same bed or layer. The monotones are found together also, generally several kinds in one deposit; but never, so far as known, closely associated with marbles which are white or bluish-gray.

As the bluish-gray marbles belong to the same family, so to speak, as the white marbles, they will be referred to hereafter as one of the latter.

White marbles available for use in large quantities, are all more or less clouded or veined. The very small amount of really pure white marble in the world is too valuable and is insufficient in amount to be used for such general purposes as toilets and corridors.

In determining the utility of a white marble for use in school buildings, there are just two necessary tests. The veins and clouding must be susceptible of a polish almost as brilliant as the white ground mass itself, and the veined and clouded parts must be at least as hard as the ground mass. They may be a little harder, due to a small amount of silica. But this does not disqualify the marble unless, as sometimes happens, it is present in sufficient quantities to spoil its appearance. These two tests satisfactorily passed, the marble will certainly possess all of the utilitarian qualities needed, and the choice between different white marbles, all satisfactory from this point of view, becomes a question of taste and a matter of price.

All of the so-called monotone marbles which are sound have in full measure all the other qualities for satisfactory use in school buildings.

Any marble which will qualify as above indicated, will be found impervious for all practical purposes; it is very difficult to stain them. Under conditions existing anywhere in a school building, with the possible exception of a chemical laboratory, they are everlasting. Oil and red ink can be made to penetrate some of them very slightly; but if the oil or ink is promptly wiped off, there will be no penetration at all. They can be drawn out of the marble and removed, even if they are allowed to penetrate as far as they will. Except from the standpoint of rigid scientific accuracy, any of the marbles, otherwise suitable, for use under conditions herein discussed, is absolutely impervious and non-absorbent.

A polished marble surface is very easy to clean; a greasy film can be cleaned from it much more easily than from a surface of glass.

Marble is quite strong and is surprisingly elastic; it will suffer very appreciable deformation without breaking. Considering its strength its imperviousness and its ability to withstand deformation, it is far superior to any other material available in pieces of reasonable size, such as are required for wainscot and toilet-room partitions. It is, at least, as easy to keep clean

as any other material; it is less expensive than any that compares with it in cleanliness. It is in a class by itself for intrinsic beauty of color and texture. It resists sudden changes of temperature, as is shown in shower bath stalls, better than any other material comparable with it in other ways, and as well as materials otherwise inferior to it.

The Tennessee and Missouri Marbles

If small and almost immeasurable differences are to be considered, then in imperviousness, resistance to staining, and in satisfactory resistance to foot traffic, Tennessee marble, in all of its grades, stands at the head of the list. There are some very high grade white marbles that are perhaps a little too absorbent, but their value for other purposes is so high that the question of price alone would rule them out. The people who produce them would not offer them for toilets in school buildings.

Among white marbles, the commercial grades of white Italian, Vermont, Alabama, Georgia, and Alaska marbles are all suitable. The various grades of Tennessee and of the Missouri marbles from the Carthage district are all suitable. The price of none of those mentioned is prohibitive. Among the monotones (Tennessee and Missouri) the finer grades of Tennessee are generally considered more attractive in appearance, and bring the highest price. The price of a good hard white marble is likely to be about the same as that of the better grades of Tennessee. The difference in price between the highest and lowest is not very great, and is justified by the value set upon the material by the market.

It generally happens that the higher priced marbles are also more expensive to produce. The difference in price is only about sufficient to keep them in the market.

The writer of this article is financially interested only in white marble; but as a matter of personal taste and preference, he would use the lighter tones of the gray and pink Tennessee marbles for toilets and corridors of schools.

In school buildings—especially in toilets—a cove border should always be used. It is well worth the small extra cost in other places as well.

Toilet-room partitions should have a finished thickness of at least one inch; 1⅛″ would be better. Stiles should be from 1½″ to 2″ thick. Toilet hardware should be substantial so as to hold the marble slabs securely in position. For all other uses, the regular ⅞″ material, made from slabs which are ⅞″ thick as they come from the saws, before finishing, is entirely suitable. The finished thickness of such material is from ¾″ to 13/16″.

Probably the National Association of Marble Dealers will soon adopt and recommend standard designs for toilet rooms, covering dimensions of closet and urinal stalls, thickness of materials, details of hardware, details of cove border, etc. In the meanwhile, it would be wise for any large city to adopt such standards for its school buildings, as the Supervising Architect of the Treasury Department has done for the federal buildings erected by him. It reduces first cost and insures a higher standard of work.

In addition to the public corridors and the toilets of a school building, marble floors may well be considered to a certain extent for use in classrooms and auditoriums. Experience in a chain of large and busy department stores showed that marble floors were far more durable, much easier and less expensive to clean and maintain, and in the long run, more economical than any other type. They were the least noisy and the least dusty. A marked decrease in respiratory troubles among the employees followed the introduction of marble floors; the diminution of dust greatly reduced the cost of other cleaning, such as lighting fixtures, etc., and greatly diminished the dust damage to merchandise on display. It would seem that the same reasons which justify marble floors in department stores would be equally good in crowded auditoriums, etc.

There is one use for which marble is the best of all available materials, and for which it is not generally used; that is for biscuit and pastry boards, candy slabs and kitchen table tops. It is thought that this might be a good suggestion in connection with the domestic science departments of public schools.

Wherever a very important school building is to be erected, or where money is available, there are always some places where a purely decorative use of marble is entirely in keeping. In all such cases, all the marbles in the market are suitable, and the architect should be guided by the object in view.

Keeping Marble Clean

This is an important question; too little has been published on the subject; there are numerous proprietary preparations on the market which are sold for cleaning marble work; many of them are decidedly objectionable.

It is easy to find interior marble jobs, not over four or five years old, that look more or less dingy and soiled. It is equally easy to find other jobs done in exactly the same marble, which are 25 or 30 years old, which are as fresh as they were on the day they were offered for final acceptance.

That there should be any considerable percentage of marble jobs that have apparently lost their freshness is due primarily to the fact that the marble men have wholly neglected their duty to their customers and to themselves.

Fortunately, it is never too late to atone for this neglect, for no matter how old and dirty a marble job may seem—if it was good to begin with, its pristine beauty can be easily restored. The material may be covered with dirt and grime, but it, itself, is as good as ever, and its original finished surface is there, unimpaired. It needs only to be cleaned.

Rule No. 1

Do not use soap, nor any powder or liquid containing soap, in cleaning marble.

The Reason: Soap invariably contains some uncombined fat. The persistent use of soap on delicately tinted marbles, whether polished or not, will finally leave a disagreeable oily, yellowish discoloration. This can be removed, but it is better not to allow it to develop.

The persistent use of soap in any form, on any kind of masonry floor, whether of marble or not, will finally leave a film which makes the floor slippery. It has the same effect as polishing the surface with floor wax.

Rule No. 2

Never use acids. Marble is crystalline limestone and acids will attack it.

Rule No. 3

Ordinarily, *clean* water and *clean* rags, sponges or mops, are *sufficient.*

It is easy to see when floors need cleaning; but the film of dust, soot, etc., settles so uniformly on wall and standing marble, that it is not noticed until it has gotten rather bad. All standing marble should be gone over with clean rags once a week, once a month, or once in two or three months, depending on circumstances.

Rule No. 4

If clean water is not sufficient, add a little ammonia, washing soda, or lye. Alkalis, weak enough not to injure the workers' hands, will not injure the marble nor its finished surface. They will accomplish all that soap will accomplish, and leave no bad effects.

Rule No. 5

If grit from the feet gets ground in or on to marble floors so that water, with or without alkali, will not remove it, scouring with finely divided silica or pumice stone will accomplish the purpose, in most cases. In extreme cases, the floor can be gone over lightly with the rubbing machines and abrasive heads that are used in finishing, in the first place. With proper daily care, scouring powders (silica or pumice, without soap) ought not to be needed oftener than once in a week or a month, and the rubbing machines not oftener than once in a year or so.

Rule No. 6

If discoloration should appear, unless it is due to iron rust, it can almost invariably be cured by the use of Javelle water, a solution of chloride of lime and bicarbonate of sodium. The teacher of chemistry can tell the janitor how to prepare it. In the case of discoloration of long standing, rags or mats saturated with Javelle water should be applied to the entire discolored surface and kept in contact with the marble for a day or more. When they are first removed, the discoloration may be still in evidence; but within another day or two it will be considerably bleached. If it does not disappear entirely, repeat the application.

Rule No. 7

The use of weak Javelle water about twice a year, in washing the marble, will probably prevent discoloration altogether. Discoloration is most likely to appear in the case of delicately colored marbles in basements and especially in basement toilet rooms. As it is usually of a brownish or yellowish tone, it is not visible on monotone marbles. It is not a true stain; it seems to be a superficial film which adheres very closely, and is untouched by water, without a bleaching agent like the chloride of lime in Javelle water.

Rule No. 8

If any apparent staining occurs which cannot be handled by following the foregoing rules, call in an expert in the marble trade.

Iron rust is one staining agent which has a great affinity for marble. It penetrates and cannot be removed. It is of extremely rare occurrence in practice. In buildings, it is due to setting marble against unprotected steel or iron, where moisture is also present all or part of the time. This is easily avoided by care in setting. In seventeen years the writer of this article has seen two or three cases where single slabs had been stained in this way. The stains themselves were about two or three inches in diameter.

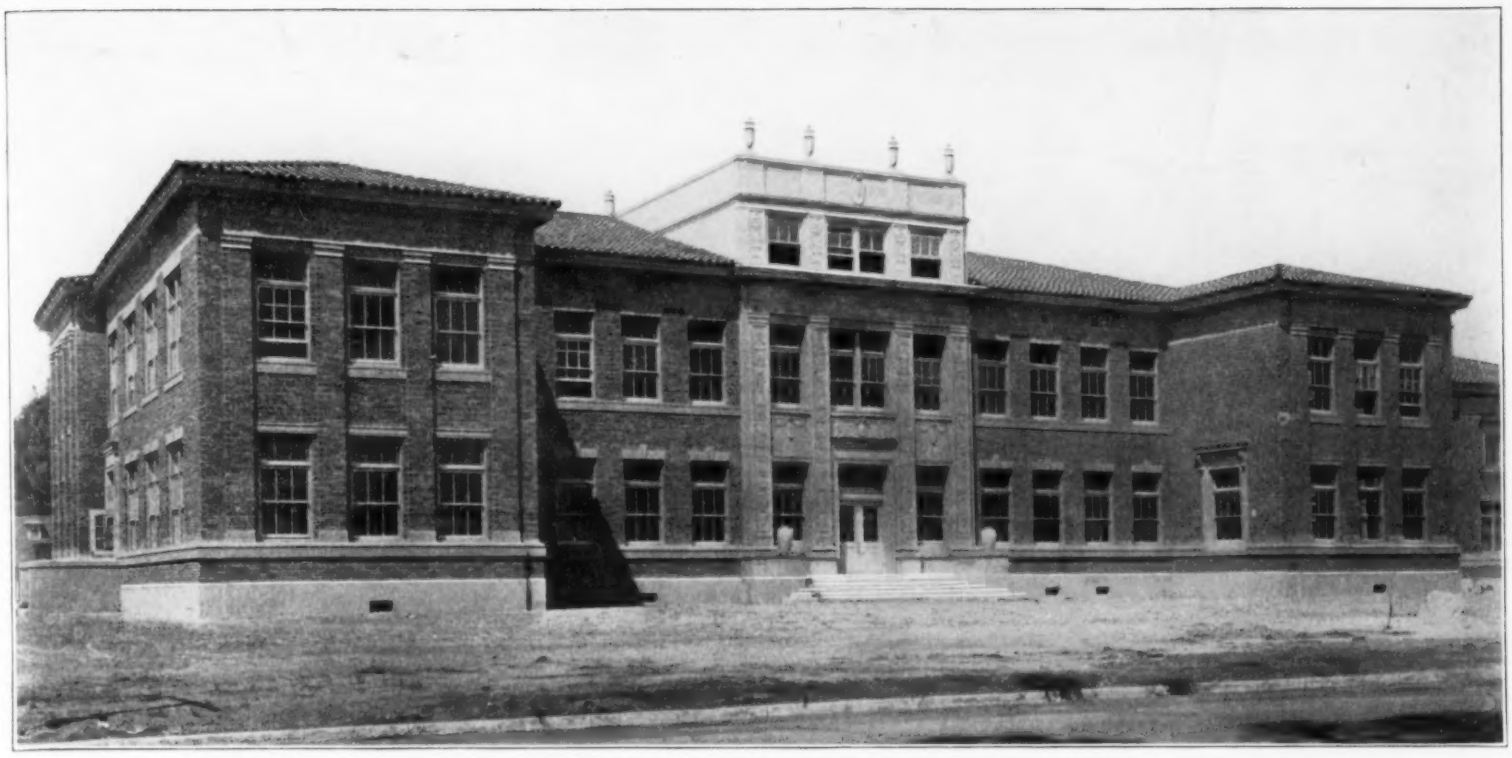
Rule No. 9

Grease spots can always be removed by keeping a handful of clean waste saturated with gasoline or benzine applied against the spot for the necessary time. This may be a few hours, or it may be a few days. In any case, the ultimate result is assured. Instead of the bit of waste, a pot of plaster of paris, mixed in the first instance with gasoline and thereafter kept saturated with gasoline, will accomplish the same purpose. A little quicklime, slaked on and around the grease spot will remove it.

Rule No. 10

Start in, from the beginning, to give the marble the moderate care and attention required to keep it clean. Then curative measures will never be needed.

Sunlight, in the open air, will finally draw out grease spots, bleach out any kind of discoloration except iron rust, and even bleach natural colors in the marble, to some extent. This is especially true of the blue tone believed to be due to minute quantities of some organic coloring matter. Possibly, in-doors, ultra-violet rays might have the same effect.



SCIENCE HALL, KERN COUNTY UNION HIGH SCHOOL, BAKERSFIELD, CALIF. Chas. H. Biggar, Architect, Bakersfield.

A Model Science Building

Paul VanderEike, Vice-Principal and Head of Science Department, Bakersfield High School, Calif.

Science Hall of Kern County Union High School, Bakersfield, Calif., has been pronounced by competent authorities as probably the best high school science building on the Pacific coast. The structure is of Georgian style of architecture, is classified as a fireproof, class A building, and cost $206,000, including equipment. It is doubtful if, from the point of construction, appearance and interior arrangement, there is a better high school and junior college building in many states.

Before the erection of the new building, chemistry was taught in basement classrooms and laboratories in what is now the administration building. This unfortunate arrangement contributed considérable to the idea that a separate building for science was necessary, for many a time students in classrooms above were forced to suffer untold discomforts from poisonous hydrogen sulphide and other gases. Although the need was very apparent, the exceptionally rapid growth of the school and the compulsory physical education law of 1915 made it necessary to provide expansion in other departments at the expense of the science department. In the meantime, for the past eight years the head of the science department and his co-workers have been busy, getting ideas from different parts of the United States on a new building and its equipment. The outcome is indeed gratifying, for not only has the arrangement been carefully worked out, but also the possible increase in school population for several years to come has been anticipated.

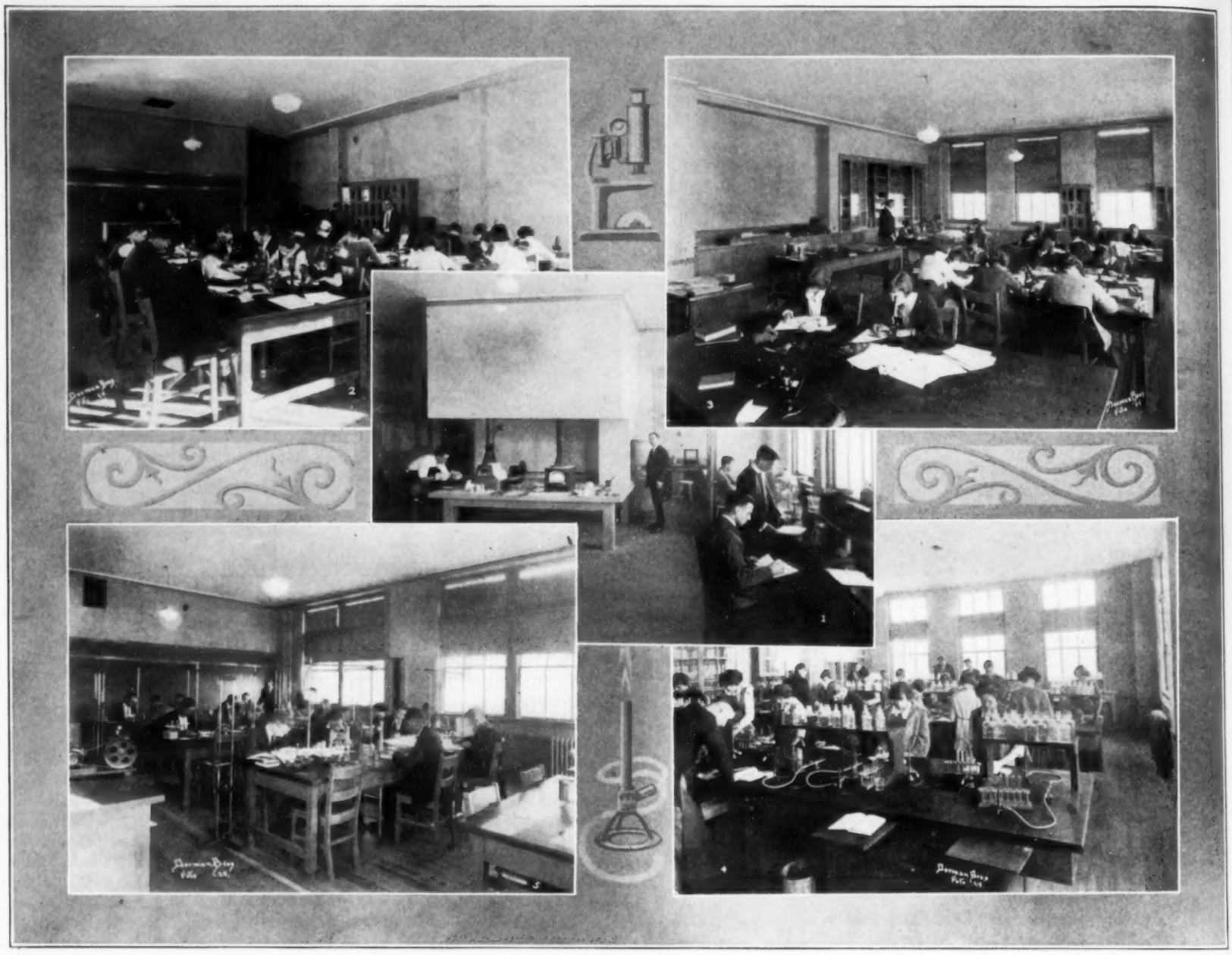
The building faces south and covers an area of 88 by 152 feet in its widest parts with a bay on the front 100 feet wide and 26 feet deep. It is two stories high, built of reinforced concrete, faced with golden ruffle pressed brick; the front entrance in the center of the bay, simulating four pillars, is terra cotta and above the entrance the cement-finish concrete cornice and the tile roof are broken by a group dormer window. In its exterior view the structure presents a dignified, imposing appearance that forcibly reminds one of a university building.

The interior is of beam and slab construction and the partitions are brick filled with hollow brick, the plastering being applied to metal lath on metal stud. As most of the upper floor is used for chemistry, the plumbing system installed is of the well-known, acid proof and almost indestructible duriron drain pipe. Maple floors have been laid in all the rooms except in the assay laboratory in which a mastic floor was laid on account of the fire hazard. All the interior finish, including the cabinets in the various laboratories and store rooms, is of birch, stained a rich silver gray. The equipment is of hardwood, stained to match the finish. The walls are calcimined a light buff. The building is heated by steam from a central heating plant which also supplies heat to the other buildings on the premises. The cost of the building alone was $186,000, and the balance of the total went for furnishings and laboratory equipment. It is noteworthy that no bond issue has as yet been necessary to carry on the extensive building program that the high school board of education is carrying out.

The interior as the floor plans show consists of a basement, main and second floors and two attic rooms. The basement has a classroom, a janitor's room, a large store room from which supplies may be taken to the upper floors by means of a dumb waiter, and a laboratory for courses in oil chemistry. Here also are installed compressed air and vacuum machines, and a motor generator for direct and alternating currents for those laboratories that need them.

On the main floor there are two laboratories for general science, one for physics, one for biology, and one for college botany. A lecture room, adjoining the biology laboratory, serves

FLOOR PLANS OF THE SCIENCE HALL, KERN COUNTY UNION HIGH SCHOOL, BAKERSFIELD, CALIFORNIA. Chas. H. Biggar, Architect, Bakersfield, California.



1. THE ASSAY LABORATORY OF THE KERN COUNTY ASSAY OFFICE IN SCIENCE HALL, KERN COUNTY HIGH SCHOOL, BAKERSFIELD, CALIFORNIA. 2. A CORNER IN THE BIOLOGICAL LABORATORY. 3. THE BOTANY LABORATORY, SHOWING THE TRAPEZOIDAL TABLES ESPECIALLY DESIGNED FOR MICROSCOPIC WORK. NO STUDENT CAN CUT OFF ANOTHER'S LIGHT AT THIS TABLE. EACH ONE SEATS SEVEN STUDENTS COMFORTABLY AND CAN ACCOMMODATE NINE. 4. ONE OF THE CHEMISTRY LABORATORIES SHOWING SPECIAL BOOK SHELF ON LABORATORY TABLES. 5. THE PHYSICS LABORATORY.

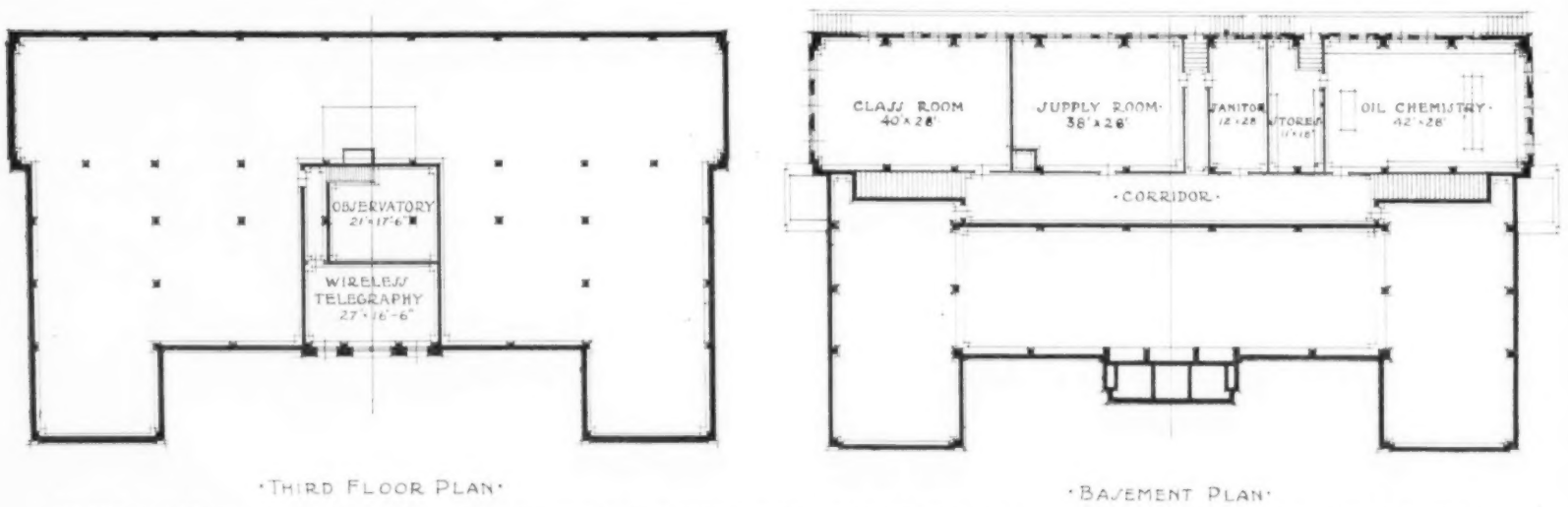
for biology and botany. Another lecture room is provided for physics which when not occupied for that subject is used for mathematics. The teachers' room, on the same floor, serves as an office for administrative purposes, as a lobby for teachers, and as a museum where collections of botanical, zoological and geological specimens may be kept for study and reference.

The second floor is devoted to chemistry, geology, mineralogy, and assaying. It comprises a college chemistry laboratory and an adjoining lecture room, two high school chemistry laboratories and an adjoining lecture room, an assay laboratory, and a geology and mineralogy laboratory. A large lecture room, with a seating capacity of about 150, is provided for joint meetings of several sections of the same class for lecture or other purposes. The attic contains a radio room in which a radio set and wireless telegraph instruments are soon to be installed after moving them from the old building where they now are. It also has an observatory with a movable skylight for the study of astronomy.

The assay laboratory is as complete as any professional assayer's office in Los Angeles or San Francisco. And it is diligently sought by prospectors of the county, for here at the Kern County assay office they may have their samples assayed at the mere cost of the material.

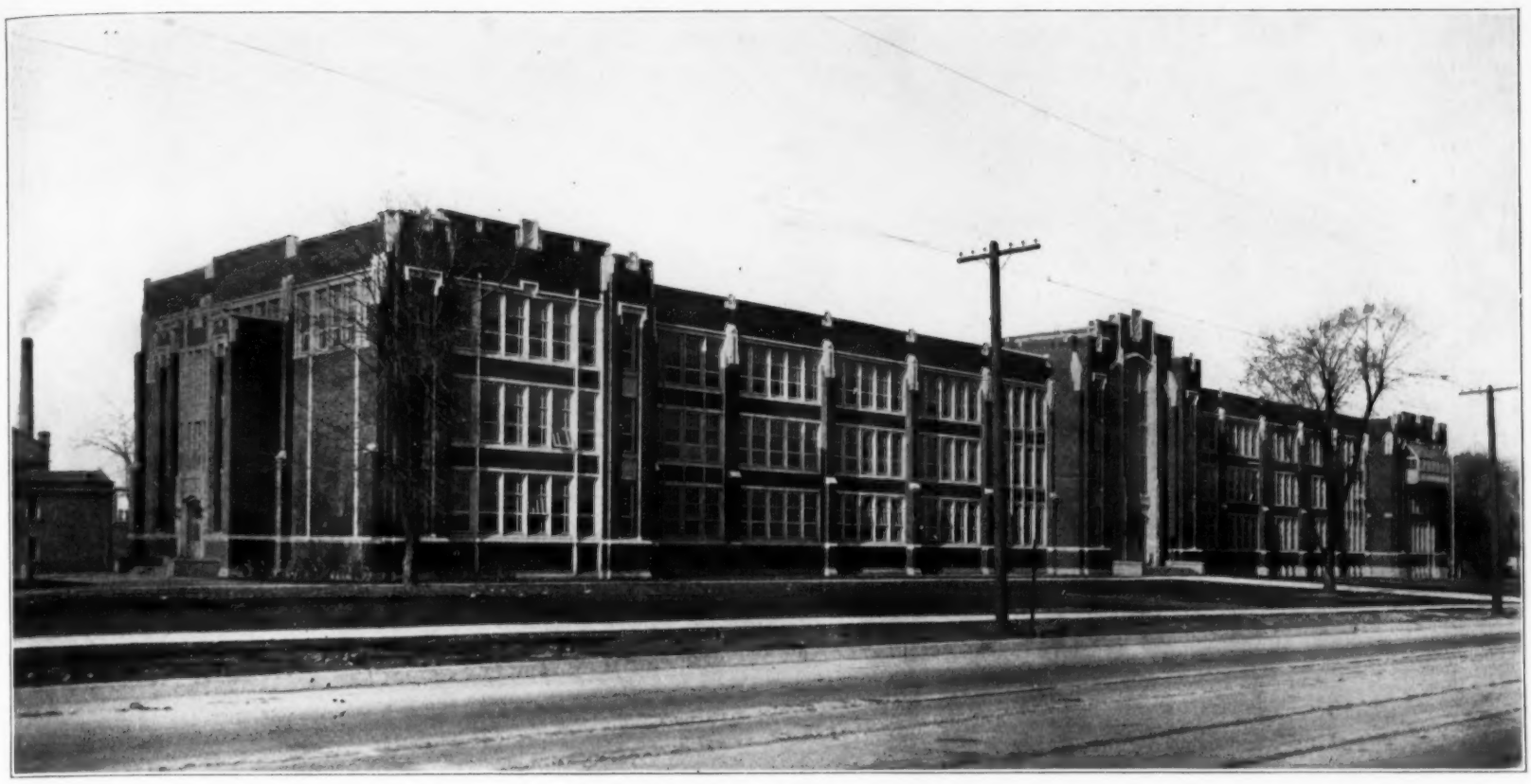
The laboratory equipment was manufactured by the Wiese Manufacturing Company of Manitowoc, Wisconsin. The physics, biology and mineralogy teachers selected stock tables but the general science, chemistry, and botany teachers designed special tables for their respective laboratories. All the lecture rooms are seated with tablet arm opera chairs, 22 inches wide, placed on raised platforms. As projection and portable De Vry moving picture machines are in quite general use in the school,

(Concluded on Page 136)



THIRD FLOOR PLAN — BASEMENT PLAN

FLOOR PLANS OF THE SCIENCE HALL, KERN COUNTY UNION HIGH SCHOOL, BAKERSFIELD, CALIF. Chas. H. Biggar, Architect, Bakersfield, Calif.



WEST HIGH SCHOOL, SALT LAKE CITY, UTAH.

NEW SCHOOL BUILDINGS IN SALT LAKE CITY

In 1919 the school board of Salt Lake City, Utah, outlined a building program involving an estimated expenditure of $3,000,000. The new West High School and the Lafayette elementary school, which have been recently completed, mark the completion of this building program. The two buildings illustrated and described on these pages are models of their types, and together with the buildings previously erected in the past few years, give Salt Lake City an excellent standing in the matter of school buildings and equipment. At present the school plant comprises 31 elementary schools, seven junior high schools and two senior high schools, representing an investment of approximately seven and one-half million dollars. The total enrollment of the schools is 28,500, with 4,300 students in the high schools.

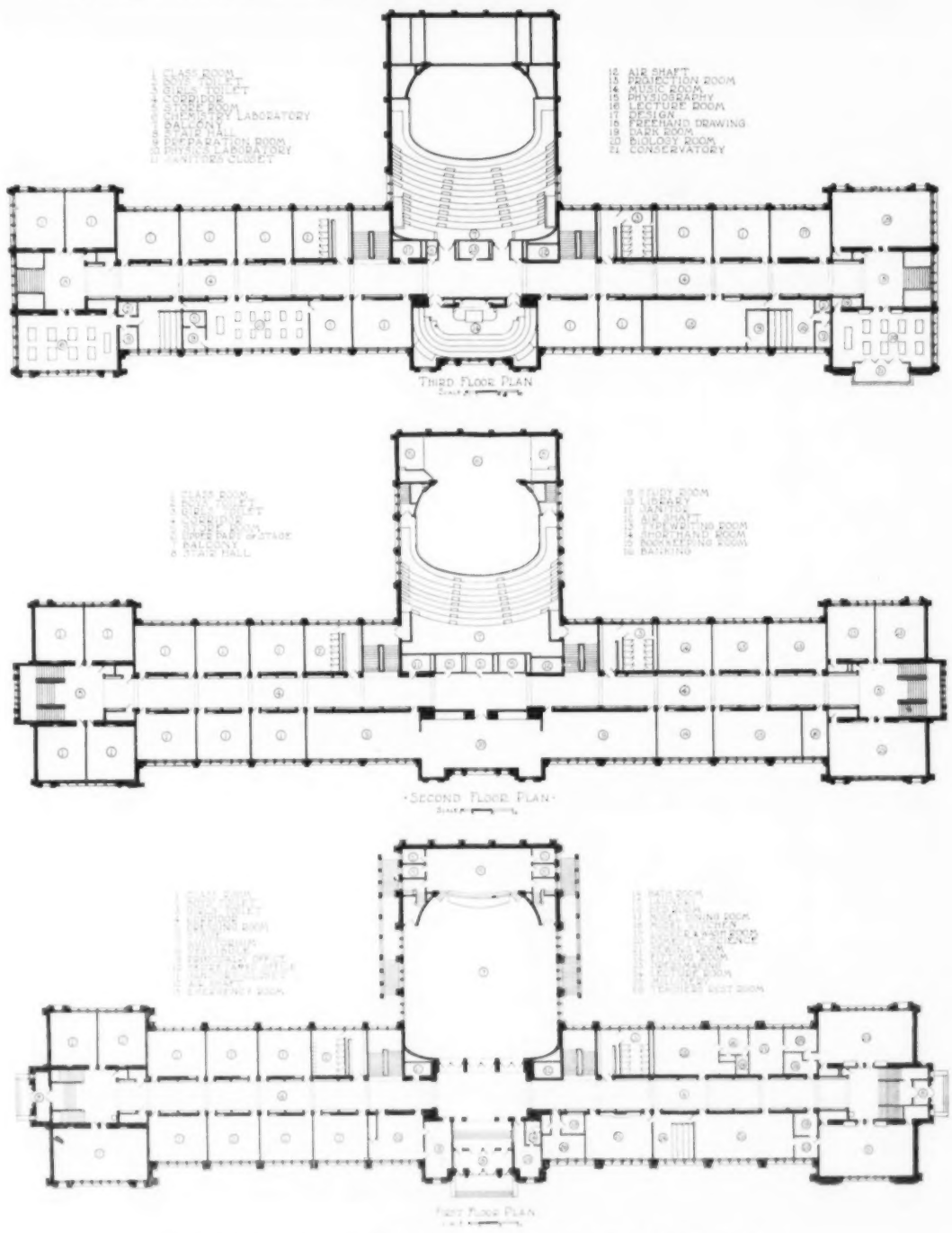
The West High School

The new West High School was completed ready for occupancy in September, 1922. It is of fireproof construction, with walls of concrete, brick and steel, and entrances of ornamental concrete. Trimmings and window details are also of concrete.

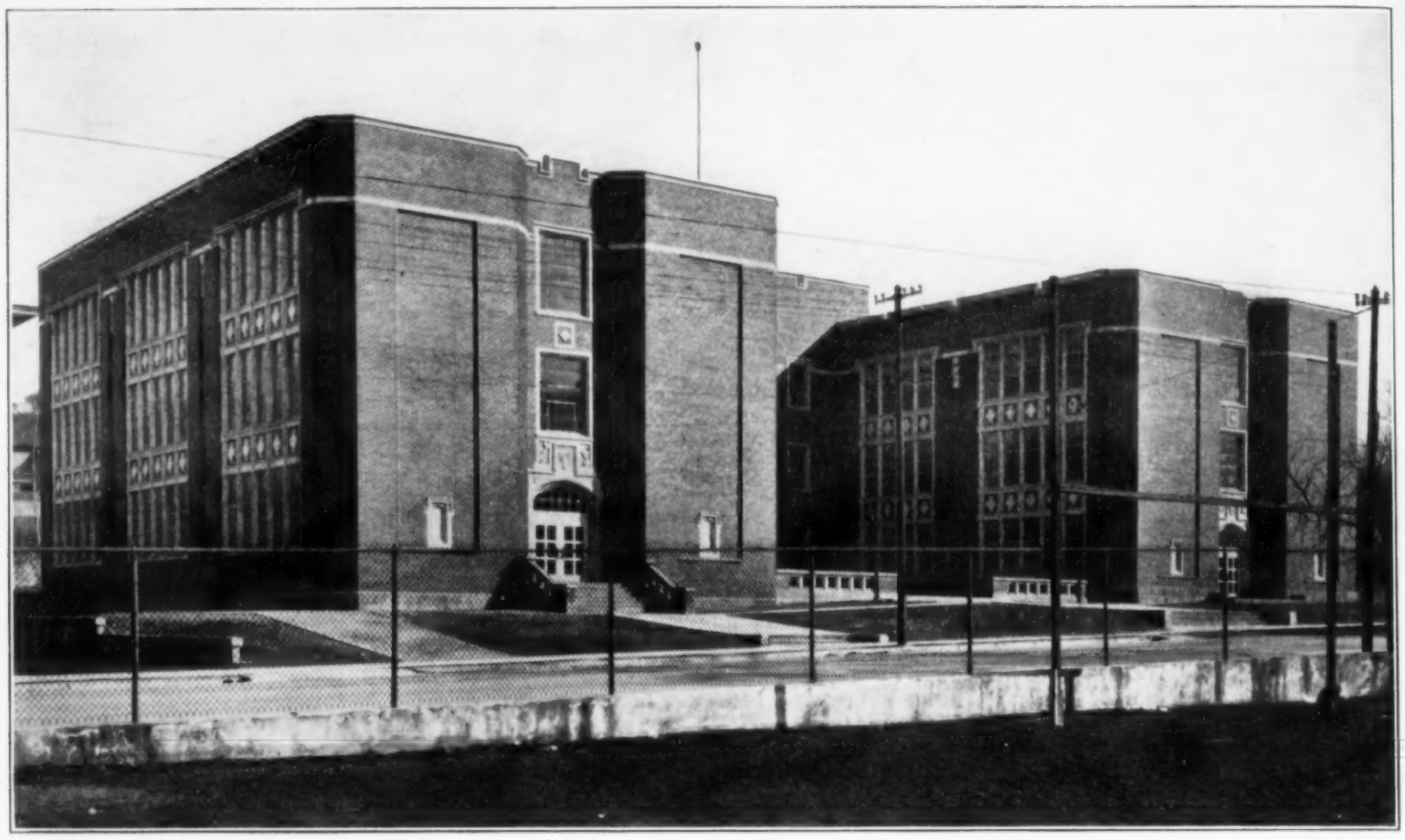
The building consists of three stories and basement. In addition to 47 classrooms, it contains general office rooms, rooms for the cadet training corps, a book-store, rifle range and gun rooms, toilet rooms, rest rooms, a model housekeeping apartment, a library, two study rooms having a capacity of 250, an auditorium equipped with a motion-picture booth and seating 1,400 persons, and a large cafeteria capable of serving 1,500 teachers and students.

The heating plant is located in a separate building and cost, including steam mains and tunnels, a total of $83,304. It consists of a concrete, brick and steel structure, reinforced concrete tunnels, and two 228 horsepower boilers. The equipment cost 67.4 cents per cubic foot, or $181.89 per boiler horsepower. The cost of the building and mechanical equipment was $80,108.

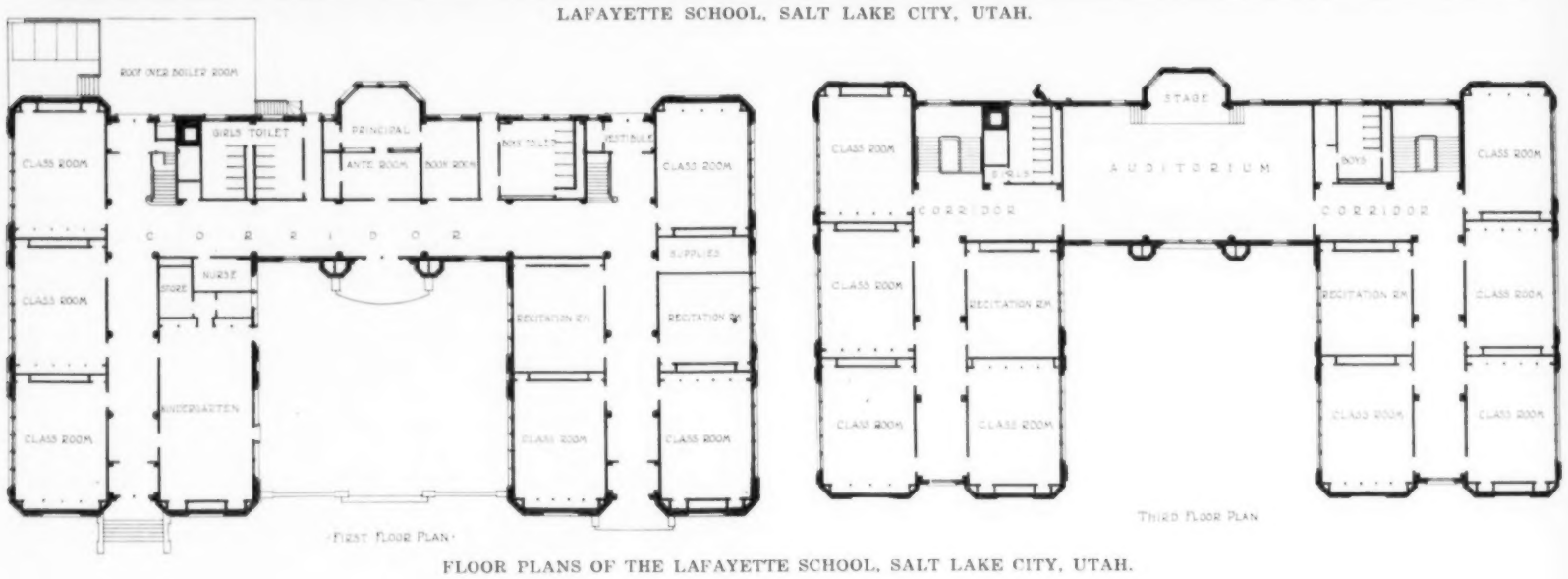
The ventilating equipment, which is located in quarters in the basement, consists of one large blower fan with a capacity of 100,000 cubic feet of air per minute. It is driven by a thirty horsepower, two-speed motor, adapted to supply 45,000 cubic feet of air to the audi-



FLOOR PLANS, WEST SIDE HIGH SCHOOL, SALT LAKE CITY, UTAH.



LAFAYETTE SCHOOL, SALT LAKE CITY, UTAH.



FLOOR PLANS OF THE LAFAYETTE SCHOOL, SALT LAKE CITY, UTAH.

torium, or the full volume to the main building alternately. One air washer of 90,000 cubic-feet-per-minute capacity is provided, together with one toilet exhaust fan of 20,000 cubic feet capacity and one chemistry exhaust fan of 3,000 cubic feet capacity.

Automatic temperature regulation is provided in each classroom.

An electric program clock system has been installed. The device controls the tower clock and automatically rings the bells in the several classrooms of the building.

The building contains a total of 2,322,800 cubic feet of floor space and cost, including construction, supervision, landscaping, furniture and equipment, a total of $794,880. The building was erected at a cost of 30.4 cents per cubic foot, or $15,000 per classroom.

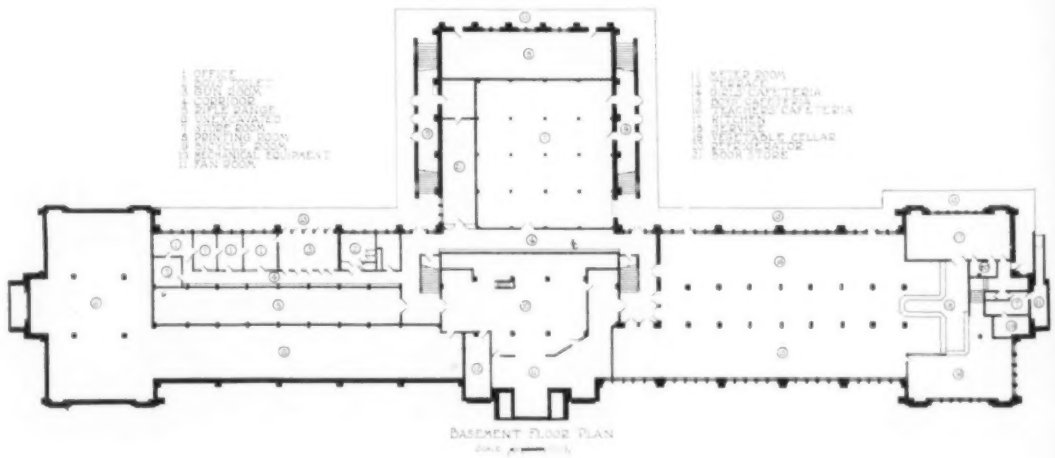
The Lafayette Elementary School

The Lafayette School was occupied in January, 1923. It is a three-story, fireproof structure of concrete, brick and steel.

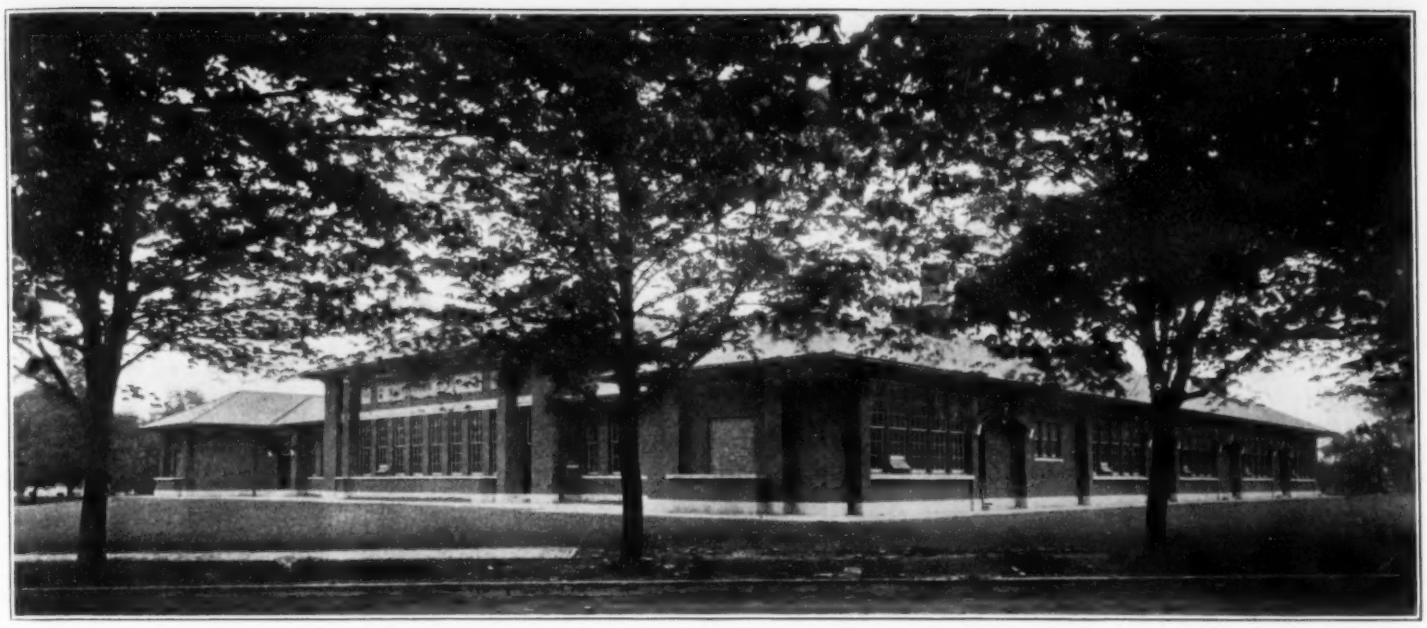
In addition to 29 classrooms, the building contains office rooms, teachers' room, book room, supply room, toilet rooms and an auditorium with a seating capacity of 260 persons.

The heating and ventilating plant is located in the basement and contains one down-draft boiler with a capacity of 18,000 square feet of radiation, one blower fan with a capacity of 50,000 cubic feet of air per minute, driven by a ten horsepower motor, an air washer with a capacity of 50,000 cubic feet of air per minute, together with toilet exhaust fans and automatic temperature control equipment in each room.

The building contains a total of 682,800 cubic feet of contents and cost a total of $235,046 for construction, supervision, landscaping, furniture and equipment. The building was erected at a cost of 26.1 cents per cubic foot, or $6,140 per classroom.



BASEMENT PLAN OF THE WEST SIDE HIGH SCHOOL, SALT LAKE CITY, UTAH.



WASHINGTON SCHOOL, QUINCY, ILL. Ernest M. Wood, Architect, Quincy, Ill.

THE WASHINGTON SCHOOL, QUINCY ILL.

Supt. Charles M. Gill

In June, 1923, the school board of Quincy, Illinois, accepted from the contractors a new grade school building that has several points of interest to school authorities and architects.

It is of the one-story type, situated on a four-acre tract, facing the southeast corner, so that sunshine will pentrate every room. Each classroom has an exit to the playgrounds as well as the corridors. Ten classrooms and a kindergarten are provided, with teachers' room and principal's office, a manual training shop and domestic science room. The building is adapted to community uses as well as school, with its auditorium seating four hundred, and a fine gymnasium on a level with the auditorium stage separated from it by a folding partition. A fireproof motion picture projector booth is also provided.

The building is heated with low-pressure, direct steam radiation and is ventilated by the "univent" system, both under Johnson thermostatic regulation. Heat losses at ceilings, inevitable in one-story constructions, are largely reduced by a four-inch layer of mineral wool.

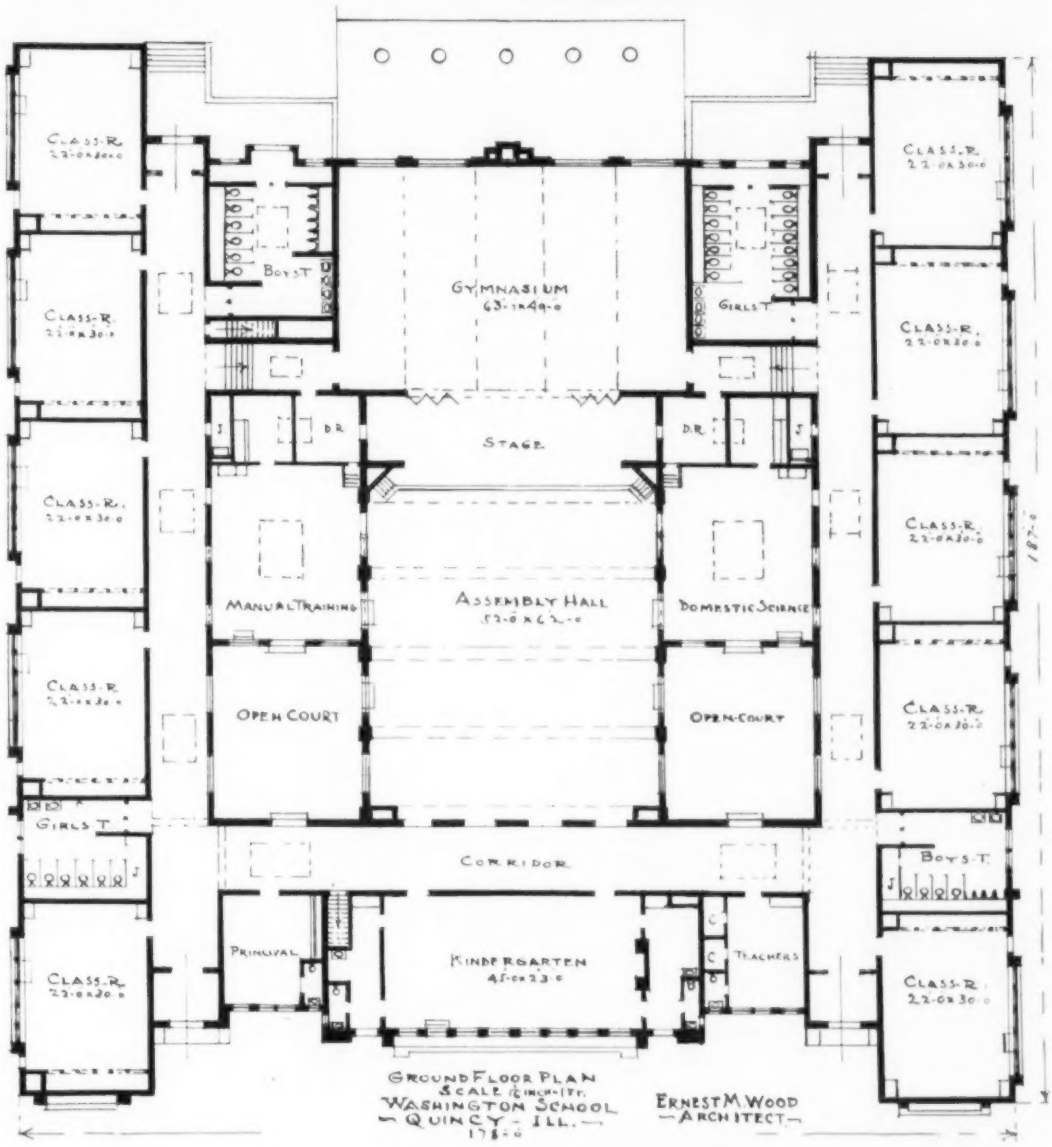
The buff of the brick, the gray of the Bedford stone trim, and the red of the asbestos shingles fit into the green surroundings in a very pleasing manner.

Floors in the corridors are of terrazzo; in toilets, tile; in rooms, maple. The woodwork is oak with Flemish finish.

The total cost of grounds, building, and furnishings was about $205,000.

The superintendent of schools, and the architect, Mr. Ernest M. Wood of Quincy, inspected carefully schools of this and other types before plans were drawn with the idea of having the building meet every demand of community and school usefulness without sacrifice of architectural attractiveness.

This is the third modern fireproof grade school completed in Quincy since 1916.



ECONOMIES IN SCHOOL BUILDING CONSTRUCTION

A Valuable Ohio Report

The high cost of school building prompted a committee in Ohio to make a study of the economies in construction and to report its findings to the state educational conference recently held in that state. The committee finds that there is no remedy for the high cost of material and labor.

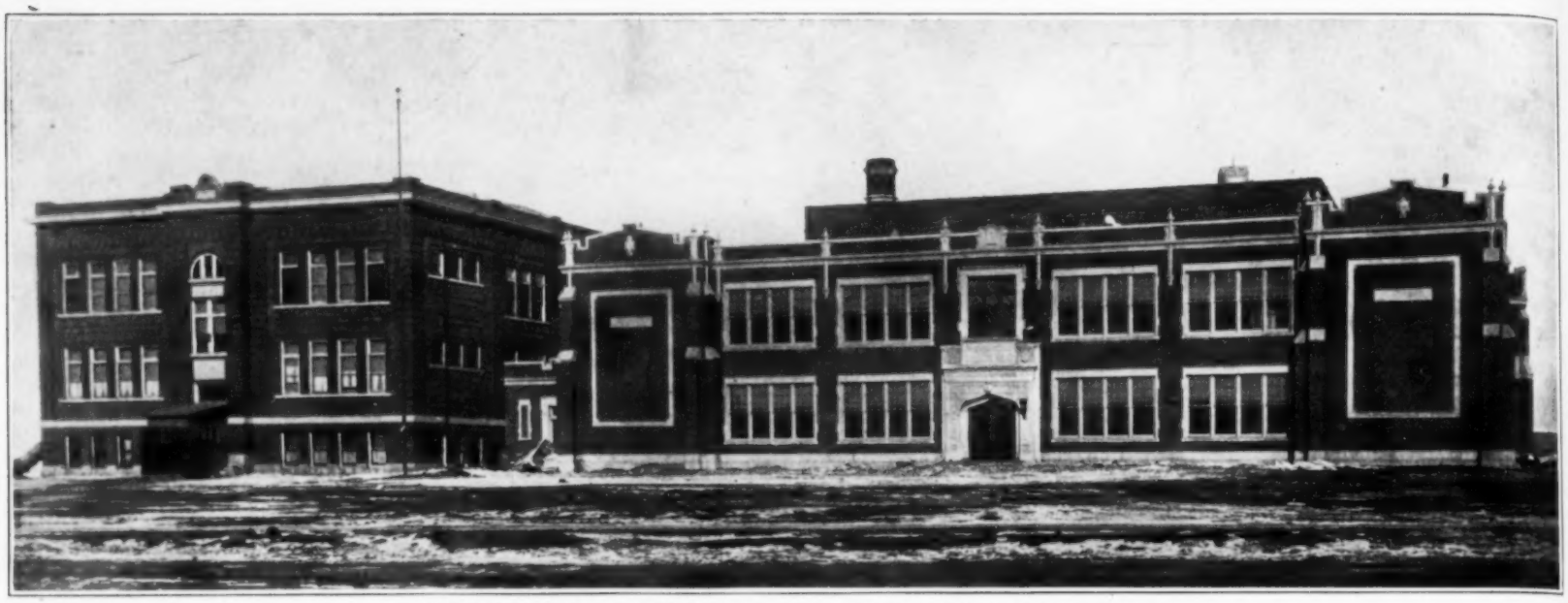
It finds, however, that unnecessary requirements in heating and ventilating are responsible for a certain percentage of increased cost, and blames the state code for it. It says:

"It is evident from recent investigations that the requirements of the state code were not a result of either investigation or careful judgment but could only be the result of either a bad guess or a deliberate attempt of unscrupulous supply organizations to prey upon the ignorance of a gullible public for monetary profit, who, taking advantage of the frenzied populace after the horrors of the Collinwood fire, were willing to capitalize the loss of children's lives.

"From inquiry made of a large number of architects, builders, practical engineers, in charge of large buildings as custodians, superintendents and principals, the almost unanimous opinion as to the state code requirement of fire doors in corridors of fireproof buildings, except where they are installed between the basements and the first floor, as a smoke screen, is that they are not only useless but are a positive menace to the protection of the children. They not only greatly impede the egress from the building but are the cause of blockades and actual "pile ups" of children at these points during fire drills.

"It is plain that an economic plan for the construction of school buildings, with the greatest possible economy of classroom or usable space as compared with cubical contents, has not been produced. With office-building owners demanding the maximum available feet of office space as compared with floor area, with hotel owners demanding the highest number of guest

(Concluded on Page 132)



MOBRIDGE SCHOOL, MOBRIDGE, S. D. U. L. Freed, Architect, Watertown, S. D.

A SOUTH DAKOTA SCHOOL BUILDING OF TODAY

Ursa L. Freed, Architect, Watertown, S. D.

The passing decades have brought to the state of South Dakota great progress in the various phases of government, industry, culture and education. Notable has been the advance made in matters pertaining to the educational system and today the elementary as well as the secondary schools stand in line with similar schools in any other school system.

Accompanying this article are illustrations of one recent school building in South Dakota which is typical of the progress made in adapting the newer school building to the needs and opportunities of the educational program.

The Mobridge high school building was dedicated on February 24, 1922, and is the culmination of the demands made upon the city for additional schoolrooms. A building survey of the entire school enrollment was made and the educational as well as the population requirements were carefully studied in arriving at a solution of the problem.

The old building which was used for high school purposes was entirely remodeled and is being used for junior high school purposes. The new building is employed for senior high school uses only. The two buildings are connected and a separate boiler room has been built in connection with the new building to furnish heat and ventilation for both the old and the new buildings. Thus, while the junior high school is separate from the new high school, yet the two are connected in one unit and under one administrative head for efficiency and economy in administration and operation.

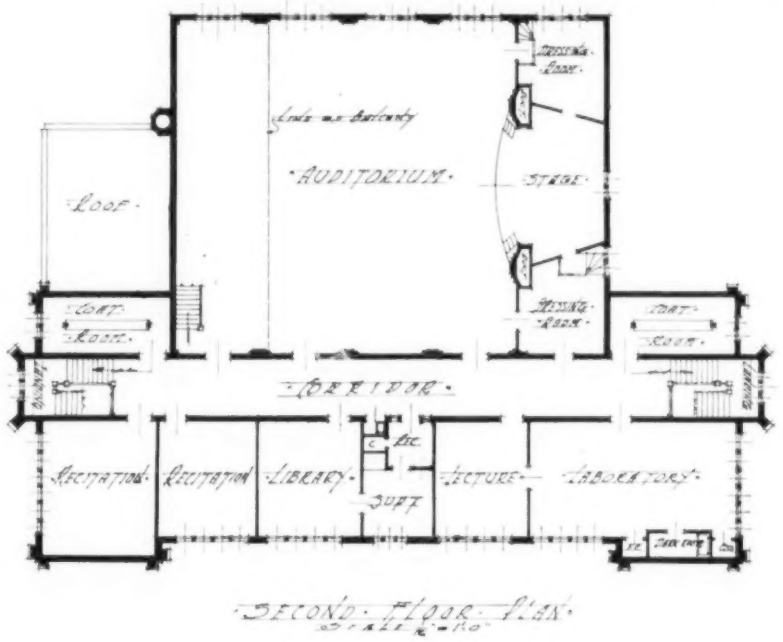
A great deal of time and study have been paid to the design of the building to make it the most modern and efficient possible for the local situation. Particular attention was given to the gymnasium which measures 45x75 feet in the clear. A balcony has been arranged on three sides to accommodate nearly 500 persons. Boys' and girls' locker rooms are directly connected and are equipped with showers, toilets and wash basins. Except for the gymnasium and accessories and space for the heating and ventilating plant, the basement of the building is unexcavated.

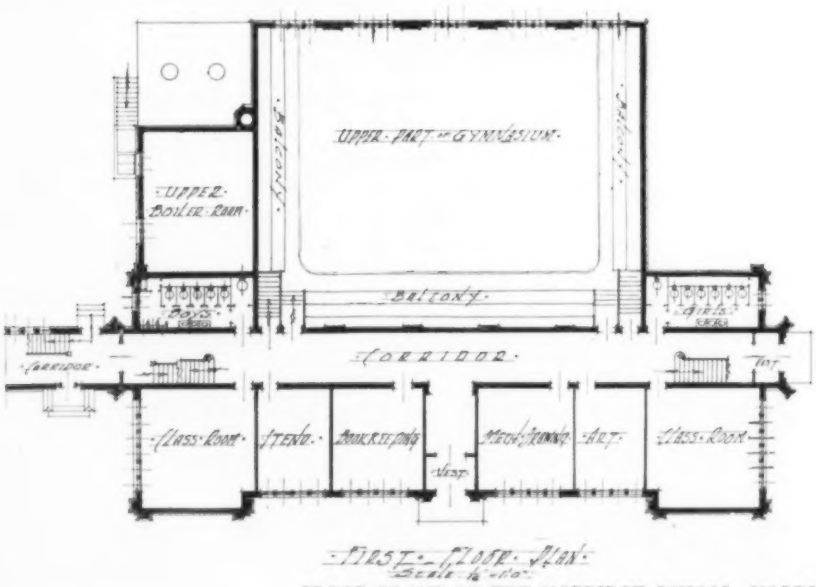
On the first floor of the building there are two standard classrooms, two rooms for the commercial department, a room for mechanical drawing and an art room. The balcony of the gymnasium is entered from the first floor. There are also boys' and girls' and teachers' toilets.

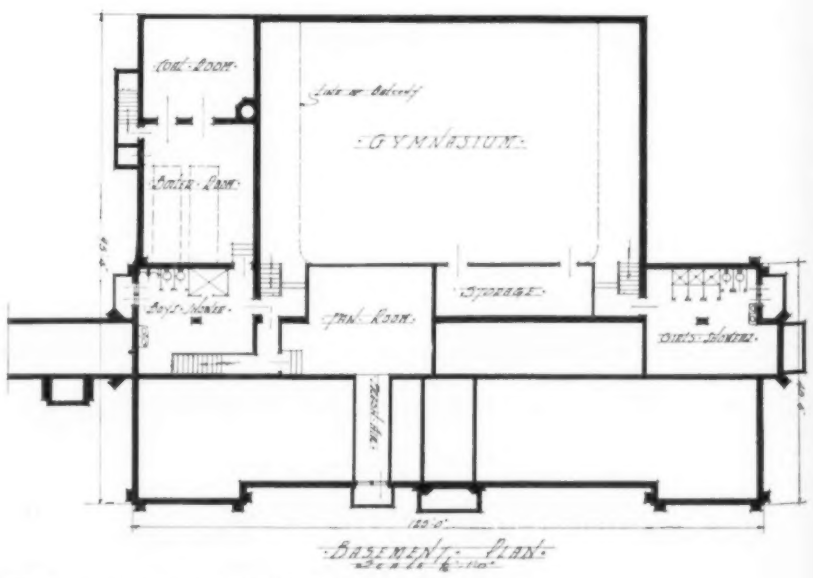
On the second floor there are two recitation rooms, a library, a large general laboratory with a lecture room adjoining and office for the superintendent.

The auditorium which serves as a study room is also entered from the second floor. This

(Concluded on Page 136)







FLOOR PLANS OF THE MOBRIDGE SCHOOL, MOBRIDGE, S. D. U. L. Freed, Architect, Watertown, S. D.

To What Extent Can Intelligence be Made to Function in Educational Achievement?

I. N. Madsen, State Normal School, Lewiston, Idaho.

A significant relation between the intelligence and educational achievement of school children has always been noted by research workers and indeed by teachers. It has been found that the bright child ranks high in his class, that he is often accelerated in school for his age, and that a significant positive correlation exists between scores in educational and intelligence tests. However, parallel with these facts are the facts that when measured in terms of his own intelligence, the results are not so good, that measured by mental age he is not usually advanced as far in school as he should be, and that the correlation between intelligence and achievement, while positive, is well below unity. In short, while it is found that intelligence is a *sine qua non* in educational achievement, it is also found that it does not function perfectly. It is the purpose of the present paper to examine into the question as to whether this is a necessary or desirable situation under typical school conditions.

As the result of recent techniques in the fields of intelligence and educational tests, it has become possible to measure more rigorously a pupil's achievement in terms of his own intelligence. The procedure for doing this has been called the "Accomplishment or Achievement Quotient Procedure." Briefly, this procedure consists of finding subject or educational ages as well as intelligence ages for the pupils to be measured. The subject ages and mental ages may then be converted into subject and intelligence quotients by dividing by the chronological age and into accomplishment quotients by dividing educational age by mental age. Normality is indicated by a quotient of 1.00* or 100. To illustrate: a pupil with a chronological age of 10 years is found to have a mental age of 12 years and a subject age of 10 years in, say, arithmetic. By the usual procedure this yields an intelligence quotient of 120 and a subject quotient of 100. The relation between mental age and subject age may be expressed directly by dividing the latter by the former or indirectly by dividing the educational quotient by the intelligence quotient. In the present case the result would be 83, and is the accomplishment quotient. Thus in this hypothetical case, we have a pupil of superior intelligence, of normal achievement when measured in terms of chronological age, but of inferior achievement when measured in terms of his mental age.

Tests Given and Treatment of Results

During the school year, 1921-1922, the writer conducted an experiment in grades V, VI, and VII in the Lewiston (Idaho) public schools to determine whether the school under typical conditions can function in bringing about a closer relation than usually exists between intelligence and achievement. The procedure was (1) to give a series of intelligence and educational tests early in November; (2) to give remedial treatment calculated to get all pupils to work up to normal capacity; and (3) to repeat the tests, using other forms for the purpose of measuring the resulting improvement, if any. The following tests were given in November:

1 The Terman Group Tests of Mental Ability, Form A.
2. The National Intelligence Tests, Scale B, Form 1.
3. The Thorndike Alpha 2 Reading Scale.
4. The Woody-McCall Mixed Fundamentals in Arithmetic, Form 2.
5. A List of Twenty Words from the Iowa Spelling Scale.

The results obtained from these tests indicated that the grades tested were normal in both intelligence and achievement. Since age norms were not given for the above tests, it was decided to obtain intelligence and educational quotients by a procedure which had previously been found serviceable by the writer.[1] Briefly this procedure consisted of dividing individual scores by medians or norms. The resulting quotients may be termed "grade quotients" and indicate to what extent a pupil is normal in achievement for his *grade*. In order to reduce this quotient to an age basis, that is, to intelligence and educational quotients, a pupil's age was divided by the norms for the grade, resulting in what may be called "age quotients." Each pupil's "grade quotient" was then divided by his "age quotient" resulting in intelligence and educational quotients.

The above described procedure involves certain assumptions which need to be justified. The age-standards are based on the fact that pupils are expected to enter the first grade between the ages of six and seven, making an average of six and a half years at the beginning of the first grade of school and of seven at mid-grade. Thus the standard ages at mid-grade for grades V, VI, and VII would be eleven, twelve, and thirteen, respectively. These theoretical age-norms agree very closely with the actual medians found by the writer in the schools of Idaho and in the Lewiston schools. The validity of this method of canceling median or standard grade ages against median or standard grade scores in a given test as is done in the procedure outlined, rests upon the further assumption that the median chronological age in a given grade coincides with the median mental age. That these are safe assumptions is shown in the following table which shows theoretical chronological ages at mid-grade, the actual median ages at mid-grade for Idaho school children and for the Lewiston school children, and the median theoretical and actual mental ages as found by Terman.[2]

TABLE I. Showing Theoretical Chronological Age, Actual Median Chronological Ages, and Actual Median Mental Ages at Mid-Grade of Elementary School Children

Grade	Chronological Ages			Mental Ages	
	Theoretical	Idaho Medians	Lewiston Medians	Terman Standards	California Medians
I	7-0			7-0	6-10
II	8-0			8-0	7-11
III	9-0	9-0		9-0	9-0
IV	10-0	10-0		10-0	9-11
V	11-0	11-4	11-0	11-0	11-0
VI	12-0	12-5	12-0	12-0	12-1
VII	13-0	13-5	13-2	13-0	13-1
VIII	14-0	14-3		14-0	14-2
IX	15-0	15-4		15-0	15-4

Since both the test and age medians agree so closely with the standards, it was decided to use the median in dividing the ages and scores of individual pupils rather than the standards. There are several advantages in doing this. In the first place, Terman gives no standards for grades V and VI for his group test and the standards for the National Intelligence Test were tentative. In the second place, in order to secure a more reliable measure of intelligence, it was decided to add the scores obtained in the two intelligence tests used; and, of course, there are no standards for such a combination of tests. A third advantage is that the medians obtained for the tests given in May for the purpose of measuring improvement could be used in dividing pupils' scores at that time and thus make unnecessary interpolation between standard scores of contiguous grades to find scores for intervening periods. That is, standard scores are usually for mid-year and if standards are desired for any other time they must be obtained by interpolation. Since the three grades involved in the present study are normal in every respect, it seems a safe assumption that the progress made from November to May would be normal progress and that the median scores in May could be used as grade norms.

That these assumptions are justified may be shown by computing reading quotients for the Thorndike-McCall Reading Scale, for which age standards have been set up, by dividing reading age by chronological age and comparing the results with reading quotients derived from the raw point scores obtained from this test by the method outlined above. When coefficients of correlation are computed between the two methods they are .98, .99, and .98 for grades V, VI, and VII respectively. Perfect correlation would have been obtained if the reading quotients had been carried out to a sufficient degree of minuteness.

Derivation and Reliability of Intelligence Quotients

As pointed out above, two group intelligence tests were used for measuring intelligence in November. The coefficients of correlation between these, the Terman Group Test, Form A, and the National Group Test, Scale B, Form 1, are .72, .47, and .67 for grades V, VI, and VII respectively. The correlations between the combined scores in these two tests with the combined scores of the alternate forms given in May are respectively .88, .85, and .84 for grades V, VI, and VII. Since intelligence is supposed to remain constant, it was decided to take the average of the intelligence quotients for November and May. Since this amounts to doubling the length of the test, we may compute by Brown's[3] formula the increased reliability of the test. This we find to be respectively .936, .919, and .913 for these grades.

Results from the November Tests

After the point scores for the intelligence and educational tests given in November had been converted into intelligence and educational quotients, coefficients of correlation were computed as indicated in Table II.

TABLE II. Showing Intercorrelations Between Intelligence and Educational Quotients for November Tests for Grades V, VI, and VII

	Reading		Arithmetic		Spelling	
Grade V (N 44)	r	P. E.	r	P. E.	r	P. E.
I. Q.	.52	.074	.54	.072	.36	.089
Reading			.52	.088	.41	.085
Arithmetic					.37	.087
Grade VI (N 34)						
I. Q.	.40	.097	.43	.093	.48	.084
Reading			.51	.082	.61	.070
Arithmetic					.47	.087
Grade VII (N 82)						
I. Q.	.70	.038	.69	.039	.51	.055
Reading			.50	.055	.37	.064
Arithmetic					.44	.060

These correlations are positive and significant. They are, however, far below perfect correlation. The reason for this is to be sought in the fact that the standards to which pupils are held are in terms of grade norms based upon teachers' own crude standards or upon standardized tests. To attain these standards, the pupils of normal intelligence need to work only with normal effort, while dull pupils must exert themselves beyond normal, and bright pupils can attain these standards while working below their normal capacity.

*In this paper, the customary procedure of multiplying the quotient by 100 will be followed.

[1]Madsen, I. N., Interpretation of achievement in Terms of Intelligence. Educational Administration and Supervision, Sept., 1921.

[2]Terman, Lewis M., Intelligence Tests and School Reorganization. World Book Company.

[3]Brown, Wm., The Essentials of Mental Measurement, Cambridge University Press.

The effect of effort as a factor in the achievement of pupils may be shown by dividing the pupils of each grade into three sections on the basis of intelligence quotients as follows:

Superior, or those having I. Q.'s above 110.
Normal, or those having I. Q.'s of 90-110.
Inferior, or those having I. Q.'s below 90.

We may then proceed to find the mean educational quotients for each section. In each group, the mean educational quotient should be approximately equal to the mean intelligence quotient if the group is working with normal effort. The discrepancy between the average I. Q. and the averages E. Q. may then be taken as a measure of the extent to which a group works above or below normal capacity, or the extent to which the accomplishment quotient rises or falls above or below 100 may be taken as a measure of this discrepancy. These results are indicated in Table III.

TABLE III. Showing Mean Educational, Intelligence and Accomplishment Quotients for Superior, Normal, and Inferior Sections of Each Grade.

Section	Educational Quotients			I. Q.	Accomplishment Quotients			
	Reading	Arithmetic	Spelling		Reading	Arithmetic	Spelling	Cases
Grade V								
Superior	110	110	110	131	85	84	86	13
Normal	100	95	90	100	100	96	92	13
Inferior	93	93	83	73	125	125	110	17
Grade VI								
Superior	109	110	103	125	88	89	82	11
Normal	102	100	85	100	102	100	85	12
Inferior	90	79	74	79	114	100	93	11
Grade VII								
Superior	109	113	94	130	88	89	75	30
Normal	103	101	67	98	105	103	72	26
Inferior	90	82	45	77	122	100	59	25

It follows from the preceding that if we desire perfect agreement between educational achievement and intelligence, we must get all pupils to work with *normal* effort. For bright pupils, this would mean more and for inferior pupils it would mean less effort than they usually put forth. Stated another way, it means that a pupil's achievement should be determined by his capacity and that the bright pupils should be given as full opportunity for realizing this achievement as the inferior pupils are given. The concept *working to capacity*, however, needs to be defined. It is here used as meaning the effort put forth by pupils of normal intelligence. Since norms for intelligence and achievement tests are based upon performances of the "normal" pupils it would seem proper to set up norms of *effort* by the same empirical methods. Such standards have the virtue of being attainable. Theoretically, it may be possible for pupils to work with *maximum* capacity for prolonged periods. Indeed this seems to have been accomplished by the inferior groups in each of the grades studied. But it is open to question whether anything would be gained educationally by having all pupils work under such strain as many of the slower pupils must do under present conditions. It can be shown also that much of the superior showing of the inferior group in educational and accomplishment quotients is due to more help from teachers, more years in school as shown by chronological age, and more help outside school hours from teachers and others. It is, therefore, reasoning in a circle to say: "If dull pupils can earn E. Q.'s and A. Q.'s of more than 100, why cannot normal and bright pupils do this?" If such special help is withheld from the inferior pupil or given equally to the normal and superior pupils, then the accomplishment of the inferior pupils diminish in comparison. It would seem, therefore, that our standards are sufficiently high if we succeed in getting pupils of all types of capacity to work with the amount of effort used by pupils of normal intelligence.

Remedial Treatment

After the November tests had shown that the correlations between intelligence and educational quotients were relatively low, steps were immediately taken to bring about a higher correlation. Two general methods, not mutually exclusive, were available, namely: sectioning, reclassification, and individualization of instruction with the same class organization. Sectioning is only practicable in the larger schools where a sufficient number of teachers are available and so could not be used in the present experiment. Reclassification on the basis of mental ability up or down according to mental age regardless of chronological age is another logical procedure which might be used. There is the objection to this, however, that it places children of widely different stages of physical development and maturity in the same grade. Furthermore, even if sectioning or reclassification are used, a certain amount of individualization is necessary. Sutherland[4] has shown, for example, that many pupils who are normal or superior in intelligence may have special disabilities in one or more subjects which can be removed by special treatment in adjustment classes. Gray[5] has shown that many pupils are defective in silent reading, not because of defective mentality, but because of removable disabilities in this subject. Similarly Fernald[6] has shown for non-spellers and non-readers that individualization of instruction may be necessary to bring pupils who are deficient in reading but normal mentally up to the norms for the grade in which they belong.

Whatever may be the relative merits of the three methods named above, administrative considerations in the three grades in which the present experiment was carried out made it necessary to resort to the third of these methods. To this end, conferences were held with the teachers of these grades immediately after the results for the tests given in November had been organized and interpreted. The tendency for dull pupils to score high and for bright pupils to score low in accomplishment when measured in terms of intelligence was pointed out and explained. It was pointed out that if the median of the classes were to be increased, it would be done best by increasing the accomplishment of the bright pupils. The teachers readily assented to this and agreed that the bright pupil was most likely to be neglected since he could maintain himself at or even above the class norms or standards without much exertion or help. Suggestions and detailed directions for individualizing instruction in silent reading, arithmetic, and spelling were then made to the teachers. Frequent conferences were held to discuss the progress made and changes in the program needed. On the whole the methods used present no novel or startling features. It is quite likely that in many schools more radical procedures may be used with more telling effect. The methods here used were calculated to be serviceable in a typical school situation without putting too great a strain upon the adaptability of teachers with typical training and experience. Revolutionary changes in reclassifying pupils were out of the question and individualization of instruction was limited by the fact that the teachers were taxed to capacity with large classes—a situation all too common in the public schools.

[4]Sutherland, A. H., Intelligence Tests and School Reorganization.

[5]Gray, W. S., Individual Difficulties in Silent Reading in Grades IV, V, and VI. Twentieth Yearbook, Part II.

[6]Fernald, Grace, Intelligence Tests and School Reorganization.

Resulting Improvement

Towards the end of May, another series of tests was given for the purpose of measuring the improvement which had resulted. The following tests were used:

1. The Terman Group Test of Mental Ability, Form B.
2. The National Intelligence Test, Scale B, Form 1.
3. The Thorndike-McCall Reading Scale, Form 1.
4. The Woody-McCall Mixed Fundamentals in Arithmetic, Form 1.
5. Twenty Words from the Iowa Spelling Scale.

The same procedure was used in converting the point scores of the intelligence and educational tests into intelligence and educational quotients, as that described for the November tests. By computing the coefficients of correlation between the intelligence and educational quotients for the May results, we can find the amount of improvement that has resulted since November. This comparison is made in Table IV, which follows:

TABLE IV. Showing Correlation Between Intelligence and Educational Quotients for November and and May. (I. Q. Based on Four Group Intelligence Tests.)

	November		May	
Grade V (N=44)	r	P. E.	r	P. E.
Reading	.52	±.074	.68	±.0545
Arithmetic	.54	±.072	.645	±.061
Spelling	.36	±.088	.62	±.063
Grade VI (N=34)				
Reading	.40	±.097	.70	±.050
Arithmetic	.43	±.093	.54	±.082
Spelling	.48	±.084	.65	±.0617
Grade VII (N=82)				
Reading	.70	±.038	.80	±.027
Arithmetic	.69	±.039	.69	±.038
Spelling	.51	±.055	.53	±.054

The results given in Table IV have been condensed in Tables V and VI. In Table V, the correlations between the intelligence quotient for each grade and the average educational quotient (reading, arithmetic, and spelling), is given, and in Table VI, the correlations between intelligence quotients and educational quotients for the three grades combined are given.

TABLE V. Showing Correlations Between Intelligence Quotients and Average Educational Quotients (Reading, Arithmetic, and Spelling) for Each Grade, for November and May.

	November		May	
	r	P. E.	r	P. E.
Grade V (N=44)	.58	±.067	.74	±.046
Grade VI (N=34)	.70	±.058	.825	±.037
Grade VII (N=82)	.73	±.035	.84	±.020

TABLE VI. Showing Correlations Between Intelligence and Educational Quotients with all Grades Combined for Each Subject, for November and May.

(N=160)	November		May	
	r	P. E.	r	P. E.
Reading	.62	±.033	.72	±.027
Arithmetic	.56	±.036	.62	±.033
Spelling	.47	±.041	.55	±.37

The three preceding tables indicate that there is a material increase in the coefficient of correlations from November to May except in arithmetic and spelling for the seventh grade as shown in Table IV. This means that it is possible by comparatively simple methods to increase the achievements of pupils who are not working with normal capacity. The small amount of increase in arithmetic and spelling may be partially accounted for by the fact that the correlations for November were already fairly high so that less improvement was possible. A further reason for the small amount of increase in the case of arithmetic is that ten pupils received special training in arithmetic in connection with another experiment not conducted by the writer. When these ten are eliminated the correlation rises from .69 to .76 for May. It is probable also that there were a number of normal and superior pupils who had special difficulties similar to those discussed in connection with Sutherland's, Gray's, and Fernald's experiments. If all of such pupils could have been reached, the May correlations would have been still higher.

When the educational quotients in reading, arithmetic, and spelling are averaged and the

correlations with intelligence quotients computed, "r" increases for both November and May. This is probably because variable errors which reduce the size of the correlations for a single test, operate to a less extent when the results of several tests are combined. That is, the average of the three educational tests, while not technically "true scores," is more reliable than any one of them. The increase in correlation between I. Q. and E. Q. in reading and I. Q. and E. Q. in arithmetic shows that intelligence is operating more in May than in November, in the sense, at least that achievement in reading and arithmetic can be predicted better from the I. Q. in May than in November.

Summary and Conclusions

We have thus seen that there is a significant increase in the correlations between intelligence and educational quotients from November to May. The correlations are still below unity in May, however. Is it probable that a closer correlation can be brought about in this period of time by the same or similar methods that were used in this experiment or by other methods? It is interesting in this connection to compare the results shown in the preceding chapter with results obtained by Franzen[7] at Garden City, which were obtained by a reclassification of pupils. Table VII gives the gains in correlation between the periods for which the pupils were tested. In this table V. Q. means Thorndike Vocabulary Age divided by the chronological age; R. Q. means Alpha 2 Reading Age divided by chronological age; and C. Q. means Kelley-Trabue Completion Age divided by chronological age.

TABLE VII. Correlation of Intelligence Quotients with Educational Quotients in Franzen's Garden City Experiment, and Gains in Correlations for Different Periods. (N=48).

	Correlations of I. Q. With Various Educational Quotients				Gains in Correlations to		
	Nov. 1918	June 1919	Nov. 1919	June 1920	June 1919	Nov. 1919	June 1920
V. Q. ..	.72	.73	.86	.81	.01	.14	.09
R. Q. ..	.62	.65	.65	.79	.03	.03	.17
C. Q. ..	.63	.62	.79	.84	—.01	.16	.21

Note: The above table should be interpreted as follows: The correlation of the I. Q. with the Thorndike Vocabulary Quotient is .72, .73, .86, and .81 for the various periods designated at the head of each column. The gains in this correlation from November, 1918 to June, 1919, is .01, etc.

From Tables IV, V, and VI it will be seen that in the amount of correlation in the present experiment for the six months are greater than in Franzen's Garden City experiment for the same period of time and compare very favorably with the amount of gain made in the whole period. The two experiments agree remarkably closely in the correlations of I. Q. with E. Q. for the first six or seven months. That is, the effect of reclassification in Franzen's experiment resulted in raising the correlations to the same point as did individualization in the present experiment. It will be seen from these tables also that the correlations at the beginning of the Garden City experiment were somewhat higher than those at the beginning of the present experiment, except in the case of reading quotients for which the correlations with intelligence are .62 in both experiments.

The fact that the gains in the Garden City experiment are relatively small during the first six or seven months and for each of the following periods would seem to indicate that when the correlations are already fairly high, rapid gains cannot be expected and that what has been gained must be retained at the expense of continued vigilance. It is also possible that a correlation of unity between I. Q. and E. Q. is prevented by imperfections in the tests for measuring this relation. It has already been shown that the correlations rise as a result of increasing the reliability of the tests by increasing the length.

That the gains in the correlations between intelligence and achievement in the present experiment are as high as can be expected under present methods of measuring this relationship is indicated also in an investigation by Hilliard.[8] Hilliard's problem was to determine the types of difficulty in comprehension of reading. His investigation was one of status and the pupils whom he tested were tested only at one period. As a part of his investigation, he gave tests to the pupils of the University Elementary School of the State University of Iowa and to four elementary schools of Cedar Rapids, Iowa. The following table adapted from Hilliard shows the intercorrelations between the Terman Group Intelligence Test and certain educational tests, for the fifth grades of these schools.

TABLE VIII. Showing Intercorrelations Between Scores in Tests Given to Fifth Grade Pupils of Four Cedar Rapids, Iowa, Schools and the University Elementary School (Terman Group Test and Reading, Vocabulary, and Organization Tests).

	r	P. E.
I. Johnson School (20 pupils)		
Terman Group Test with Thorndike-McCall Reading	.459	±.119
Terman Group Test with Thorndike-McCall Visual Vocabulary	.069	±.149
Terman Group Test with Greene Organization	.397	±.127
II. Buchannan School (26 pupils)		
Terman Group Test with Thorndike-McCall Reading	.683	±.070
Terman Group Test with Thorndike-McCall Visual Vocabulary	.696	±.068
Terman Group Test with Greene Organization	.681	±.071
III. Jackson School (40 pupils)		
Terman Group Test with Thorndike-McCall Reading	.615	±.066
Terman Group Test with Thorndike-McCall Visual Vocabulary	.645	±.062
Terman Group Test with Greene Organization	.339	±.094
IV. Polk School (50 pupils)		
Terman Group Test with Thorndike-McCall Reading	.542	±.067
Terman Group Test with Thorndike-McCall Visual Vocabulary	.604	±.060
Terman Group Test with Greene Organization	.364	±.085
V. University Elementary School (25 pupils)		
Terman Group Test with Thorndike-McCall Reading	.827	±.041
Terman Group Test with Thorndike-McCall Visual Vocabulary	.547	±.095
Terman Group Test with Greene Organization	.754	±.058

That Hilliard is correct in this interpretation is suggested by the fact that the correlations for the four Cedar Rapids schools correspond quite closely to the correlations between intelligence and achievement found for the Lewiston schools in the November tests before remedial steps had been taken to increase the relationship. In other words, both the Cedar Rapids and the Lewiston schools had been taught by teachers whose tendencies were to neglect the superior child in favor of the dull child. This interpretation is further confirmed by the fact that there is substantial agreement between the correlations of intelligence and achievement for the University Elementary Schools, the Garden City Schools, and the Lewiston Schools *after* remedial instruction. In all three, the aim was to "push each child to the limits of his capacity," by different methods to be sure but with very nearly the same effect.

Although the intercorrelations between intelligence and achievement in none of the three schools are as high as unity, they are sufficiently above the intercorrelations obtained under typical school conditions to make it very much worth while for the school to attempt to bring about a higher correlation by means best suited to the given situation. This statement is made with full consciousness of the present limitations and defects of the "A. Q. Procedure."[9] The present experiment agrees with the results obtained in the Garden City and the University Elementary Schools that unless pupils can be brought to work with normal capacity, there will be a serious maladjustment between intelligence and achievement.

[8]Hilliard, George H., Probable Types of Difficulty Underlying Some Scores in Comprehension Tests in Silent Reading. Doctor's Dissertation in the State University of Iowa.

[9]For a searching and critical examination of the A. Q. Procedure see Toops, Herbert, and Symonds, P. M., in "What Shall We Expect of the A. Q?", Journal of Educational Psychology, Dec., 1922, and Jan., 1923.

THE OLD AND NEW IN SCHOOL ADMINISTRATION

During periods of school board elections something is heard occasionally of the desirability of infusing new blood into an old body. The argument is sometimes advanced that the old sticks on the board of education must be ousted and the new twigs supplied instead, if real progress is to be obtained. Or else, as an Illinois editor puts it: "The school board needs new blood. Nothing will help it out like the infusion of vitality that youth will bring. It needs the enthusiasm, the vision and the spirit of younger men and women."

If the average community were consulted as to the character of its board of education it would be found that conservation is the watchword of the hour. At any rate, the taxpayer is not likely to complain that the board is too conservative.

Whatever may be said on the score of the old and new in school administration service it remains after all that, barring those of extreme youth and those of extreme age, it is not a question of either youth or age when it comes to measuring up the personnel of a board of education.

True, an optimistic spirit should guide the departures of such a body. But, optimism is not a monopoly of youth, nor pessimism the exclusive affliction of age. Long and continuous service may create lethargy, while on the other hand newness and inexperience may lead to blunders. The ultra-progressive spirit of youth may require the tempering influences of the ultra-conservatism of age.

The editor above quoted sees more progress in youth than in age. He says:

"In the hands of younger men and women a stilted program of building conceived ten years ago might be torn to shreds without any emotion. It would be entirely too venerable, too cut-and-dried to suit their reactions. It would not be elastic enough to bargain with the future which sometimes has to make quick bargains. An educational emergency with our present school board has no more standing than a kettle of fish. The old building program has served its purpose. It was time it was torn to pieces and the emergency of a new high school building properly presented to the voters. They may defeat a bond issue but we will be no worse off and youth and enthusiasm will have had a chance. Suppressed, it is yearning to blow the lid off and assert itself."

All this sounds breezy and fine. It has the ring of progress. Nevertheless every departure in school administration, going before a tax-paying constituency in the form of a bond issue, is ultimately tested in the light of reason. The youthful mind may initiate and devise with greater readiness but it requires the combined judgment of both youth and age, and a due regard for the tax ability of the community, to determine the issue.

Every board of education requires from time to time the infusion of new blood, not necessarily the youthful only, and the introduction of new members who bring to their task a new enthusiasm and readiness to work for a great cause. Thus the old will be inspired by the new in carrying forward a sacred task.

THE AMERICAN
School Board Journal

WM. GEO. BRUCE
WM. C. BRUCE } Editors

EDITORIAL

WHAT CAN THE COMMUNITY DEMAND OF THE BOARD OF EDUCATION?

The answer to the question, what the community may justly demand at the hands of the school authorities, is at once so obvious that any discussion of the same would seem superfluous.

And yet, when the demands made by the public, as they assert themselves in many American communities, are analyzed and the embarrassing situations frequently arising out of them are measured, then it would appear that occasional discussion on the subject is not entirely out of place.

The immediate point of contact between the public and the school and its patrons is not so much the board of education as it is the professional workers, superintendents, principals and teachers. These constitute the buffer between a critical constituency and the administration, and much depends upon their tact and judgment in allaying rupture and maintaining reasonably harmonious relations.

But, on the other hand, the board of education stands in a more conspicuous attitude before the general taxpaying public. The policies formulated and new departures engaged in by the administrative body may, when these touch the individual purse, become subjects of public discussion which aggravate themselves into a heated division of opinion and sentiment.

The unfeasible and unreasonable is certain to come to the surface. The street corner gossip stimulates the currents of misinformation and petty prejudices until some misguided editor enters the fray, mistaking the majority sentiment for wisdom, only to befog the real problem and complicate the whole situation. The citizen who has an ax to grind pops up just so often. If he has not some relative who wants a job to teach, or a superannuated relative whom he wants retained as teacher, he may have a choice piece of property or something else to sell to the school system, etc.

And yet all these demands, while at times are vexatious, and always annoying, are after all merely incidental and passing. After all idle chatter has spent itself, and the sputterings of misconception and misinformation have been allayed, the judgment of a thoughtful and right-minded constituency usually prevails. Common sense will sooner or later come to the rescue.

Where the time element comes into play, the thing that is deemed expedient in its prospective aspects by the school administrative body may be deemed unwise today by some people. But the ultimate purpose of this or that departure, or the several phases of a contemplated project, cannot always be explained to the satisfaction of every objector that happens to come along. Some things must be taken for granted by somebody. General public confidence in the administration must overcome petty notions and unwarranted judgment.

It is that constituency which has its children in the schools and that still larger constituency which pays its taxes without making any noise, that should be borne in mind. And, after all, it is what a silent, patient and unselfish constituency has a right to demand, in the way of an efficient school, that counts.

The board of education that secures proper service out of the tax moneys placed at its disposal, reinforces the professional ranks from time to time, maintaining the best obtainable standard of efficiency, and prompting the mental, moral and physical welfare of a pupil constituency, comes near the demands that can reasonably be made of that body.

AN IMMEDIATE OBJECTIVE

The standards of efficiency in American schools reached here and there are controlled by immediate conditions and circumstances. The school may, owing to these conditions and circumstances, manifest upward and downward tendencies. Professional service, which has been subject to the law of supply and demand, may not always—at least as to quality—be at the ready command of the schools. Fluctuations in the output of teacher training schools have always been manifest.

Thus, it has happened that with the shifts and disturbances of recent years in the economic conditions of the country the supply of competent teacher service was reduced to a minimum. The immediate remedy was sought in a higher compensation for that service. It stimulated accessions to the professional ranks. The remedy was effective.

The call, which rang through the halls of school administration from one end of the land to the other, was for higher salaries for teachers. The consequence was a stronger recruiting of the ranks of the teaching service. The profession had become more attractive from a pecuniary point of view.

In recent months normal school heads have risen to remark that an impending over-supply of trained workers is at hand. The quotas everywhere are filled, and the lists of reserve or substitute teachers have been lengthened. The supply, it is said, is beginning to exceed the demand.

Whether this be true or not, calm reasoning must lead to the conclusion that the supply of competent teachers is not likely ever to be too large. The question, moreover, is whether the demand for qualified instructors will assert itself to the degree that the real need for better instructors actually exists.

If the statements made by leading educators are correct, namely, that the schools of the land are afflicted with poor teachers, then the time to replace them with better ones has arrived. If the teacher training schools are fearful that their output cannot be absorbed, then they should be assured that the demand for competent teaching is always good.

The situation spells higher standards. The opportunity to rid the schools of half-baked as well as superannuated teachers rests with the school administrative authority. A courageous superintendent, backed by a high-minded and fearless board of education, can engage in a weeding out process with promising results.

We call to mind where superintendents have adopted a policy of higher standards and have had the unqualified support of their boards behind them. One superintendent in an Ohio city quietly dropped sixteen incompetents during the year. The board has authorized him to drop five more if these, upon proper cautioning, will not render better service.

But, these efforts in the direction of higher standards not only require a strong executive in the person of superintendent, but an equally strong board of education—one that at least manifests strength in upholding the executive. Those who have encountered the experience know that in the whole range of school administration there is no task more embarrassing than that of removing a superannuated teacher, and none that is more likely to be followed by unpleasant commotion.

Thus, in view of the fact that the compensation of teachers is now upon an equitable basis and that the supply of competent teachers is increasing, the opportunity for raising the standards of the teaching service is also at hand. Rather than yield to a prevailing economic pressure by reducing salaries, the tendency should be to eliminate the weak in the ranks and replace them by virulent and efficient teaching ability.

The teaching profession was well warranted in asking for better compensation. Now that the public is paying better salaries, it is equally well warranted in asking for better teaching service. The hour to call for higher standards is at hand.

PROPOSED ECONOMIES IN SCHOOL ADMINISTRATION COSTS

The effort made by Ohio educators in finding the waste, if any, in the administration of the schools is most commendable. Boards of education may wrestle with the discrepancies between school support and school needs but if economies are to be effected in the purely educational operation of a school system the schoolmaster's judgment must be consulted. He alone will be able to determine here upon feasible economies.

The Ohio educators went to the bottom of the subject as applied to that state, which means that they surveyed the educational angles of the same and contemplated the possibilities of cutting and trimming costs. They are agreed at the outset that administration of the schools is not attended with any apparent extravagance at this time. They are further agreed that teachers' salaries cannot, either in the light of general living costs, the compensation paid in other fields of activity, or in consideration of the services demanded, be subjected to any reductions.

In turning their attention to the subject of supervisory and administrative organization they reach certain conclusions with reasonable unanimity, namely, that in a better return for the dollar expended the economies most feasible may be achieved. They entertain grave doubts whether the lessening of costs secured by the doubling of classes, the lengthening of the school hours, or the lopping off of special studies, will be tolerated by the public.

At any rate, if economies of this character were inaugurated it is quite reasonable to assume that the public would enter a serious protest. Ample evidence is afforded in the periodic cry against fads and frills. When the things that have been thoughtlessly decried are to be dropped the public invariably insists upon their retention. Thus special studies hold their place more securely now than ever before.

The educators are unquestionably sound when they hold that the supervisory labors of a school system afford the best possibilities for real economy. By intensifying the sincerity and efficiency of the teaching forces, individual and collective, the dollar expended will yield a larger return. Here and there a superflous teacher, or a minor study, may be culled from the system, but in the main, the momentum of the professional services must meet the situation.

To point out what the country is expending for cosmetics and cigarettes, or what wage bricklayers and plumbers may command, does not reduce school costs nor reimburse the school budget. The purpose after all is to make the school system all that it can and ought to be for which the public is willing to pay the price.

The effort in the direction of economy is always timely. In the industrial field the check on leakage and wastage is a fixed part of an

efficiency policy. The highest expert service is here employed. The same effort is made in the channels of commerce.

What, then, is true in commerce and industry ought to be doubly true in the field of school government. Here public funds, and not private resources, are constantly expended. Again, it is unquestionably one of the functions of education to set an example in a wise application of time, energy and money. The public has a right to expect that its money is being wisely expended and that those who do the spending exercise a due regard for the economies that are reasonably within accomplishment.

THE PRESTIGE AND POWER OF THE NATIONAL EDUCATION ASSOCIATION

The fact that the United States supports an association of educational workers that is at once the largest and most influential of its kind in the world should not only prove a source of pride and satisfaction to such workers, but to a thoughtful citizenship as well.

The professional spirit of those identified with the cause of education naturally prompts some form of periodical assemblage and a collective effort in the direction of advancement. But, be it said for the National Education Association, that in construction and mode of operation, it has also given expression to the American genius for organization. It is large in membership, expansive in representation, democratic in alignment, and effective in achievement.

Its very size and potential powers place an exceptional responsibility upon its chosen leaders. These are elevated upon democratic lines and serve in a representative capacity. Character and fitness, with a desire to rotate in the recognition of territory and of certain divisions of professional workers, has in the main obtained in choosing leadership. The machinery and mode of operation are reasonably within lines of workable effort and achievement.

The refinements which have obtained from time to time both as to machinery and operation, however, must continue. These must not only concern themselves with the things that tend to elevate ideals and standards within professional lines but also with the influences that radiate to the general public and its lawmakers. Some of the conclusions which are formulated must find their ultimate expression in state and national laws in order to be of permanent service and value.

Here it follows that educational progress must move conjointly with public policy. While the lawmaker will hold a willing ear to the educator he will also have his hand on the public pulse. He leans to the practical and feasible, considers the wishes of a taxpaying and vote dispensing constituency, and finds a line of action whereby he travels safely between principle and policy.

This implies that when an organization of national scope goes before the highest lawmaking body of the land with an innovation, it must be certain that that innovation has been well digested in the light of public policy and expediency, if it is to be met with acceptance. All angles must be studied before the appeal to Cæsar is ventured, if defeat and disaster are to be discerned and averted.

The formulation and submission of law measures, therefore, becomes a delicate if not a hazardous task. They may bring into serious consideration the fundamentals of government, as, for instance, the question of a centralized form of government against the upholding of the doctrine of states' rights. Caution and deliberation must guide every step. The prestige of a great organization must not be endangered. It cannot afford to encounter failure.

There is a period in the formulation of policies when the leaders should assume a judicial rather than a propagandist attitude in order to enable a free and unprejudiced expression on the part of the rank and file. Committee findings should not become binding upon the parent body until an entire constituency has been sounded if the leaders are to go forward with full authority to champion the cause.

Democratic methods are as applicable to the formulation of policies as they are to the choice of leaders. Measures of vital import seeking expression in fixed laws may be impartially presented by setting forth both the affirmative and negative sides for approval or rejection, and accepting the majority voice as the determining attitude of the body as a whole.

The lawmakers must be assured that measures presented to them in the name of an organization have had the thoughtful study and approval of the many rather than the enthusiastic championship of the few. They may even, in the interest of tolerance and fairness, be apprised of the contention made by an equally well intentioned minority. Such procedure only inspires confidence and respect.

The National Education Association possesses the power and prestige to effect national epoch-making school legislation. But, the departures in that direction must find their birth and best impulse in the desire, conscience, and judgment of the body constituency. They must grow out of the unbiased conviction of a mass judgment and then delegated to the championship of leaders, rather than come from the propagandists and later fostered by a stampeded mass judgment.

It must approach its task in a broad and tolerant spirit. To question the loyalty and sincerity of a dissenting minority is as unwise as it is discourteous. Every phase of a legislative measure should be subjected to free and frank discussion. A majority sentiment thus formulated becomes irresistible in carrying forward and realizing a well designed and laudable project.

The leaders of the organization ought not at any time attempt to traduce recognized interpretors of American education and citizenship simply because the latter have dared to differ with such leaders. Certainly, the National Education Association, dedicated as it is to the sacred cause of American citizenship, ought not to imperil its prestige and power in an ambitious clamor for an order of things that may be seriously questioned by those who have always upheld the finer traditions of the Republic and whose voice carries the ring of truth and justice.

That great body, destined by virtue of its inherent qualities and avowed purposes to exalt American ideals in manner as afforded by no other agency, may become the dominating influence in rearing that citizenship which will distinguish ours as the most virtuous, most intelligent, and most formidable among the nations of the earth. Here lies its sole and only mission. But what a wonderful mission it is!

WHAT ABOUT REPRESENTATIVE SCHOOL ADMINISTRATION?

The reforms which have been made during the past 25 years in the administrative machinery of school systems have concerned themselves with the questions of tenure, numerical size of boards of education and representation. The terms of service have been lengthened, the memberships reduced, and the representation changed from district to representation at large.

The question of representation has been by no means the least in point of importance. Direct ward or district representation in the board of education led to rivalries which prevented dealing with the school system as a distinctive unit. Thus, a city divided into twelve wards with twelve members on the board of education, each a direct representative of his own ward, contended as a rule with twelve different school systems. Each member sought advantageous recognition for his district with the result that school sites were misplaced, teacher service was unevenly distributed, and supervision became spasmodic and lop-sided. The member that was most aggressive received the greatest recognition.

With the progress of time the evils attending district representation were largely eliminated, even where the system as such remained. But, in many communities representation at large took the place of district representation, enabling the welding of school systems into definite units.

But, even where the representation-at-large method obtains there is an occasional tendency on the part of a member to favor locality against locality and to forget that he is the representative of a whole system rather than of the ward in which he resides. During a recent school board campaign the Houston (Texas) *Post* cautioned its readers by the following:

"An endeavor should be made to select men or women who are capable of representing the whole city on this board. Neither sectional nor factional considerations should enter into a selection of this kind of service. No candidate should be considered available because he happens to live in a certain part of the city. Houston is a unit. The old aldermanic theory has been scrapped here; the system has been abolished in the city government. Our city commissioners are not elected to represent any particular section of the city. Neither should our school trustees be so elected. Therefore, the only thing for the voter to consider in making his decision is this: Which of these candidates are best fitted to command the moral and financial support of the people for their schools and most capable, therefore, of serving the children best?"

The writer not only champions the idea of representation-at-large, and of dealing with the whole school system as one compact unit, but he enlists the support of an entire citizenship for that idea. If the sectional spirit is to be eliminated from school administrative service then that spirit must primarily be eliminated from the choice of school board memberships. The men and women chosen to administer the schools must have the assurance that an impartial constituency is behind them.

This means primarily that the voting constituency must think in terms of a whole community when it records its choice of members for the board of education. An intelligent approach to the subject from this standpoint only will make for school administrative bodies that are truly representative.

CHATS DURING RECESS

"I have never found a red-haired child in California to be mentally defective," recently said Will C. Wood, state superintendent. "Teachers with red coiffures in this state at least are invariably far above the average in intelligence and teaching ability."

—A school survey is described in the Wheaton, Illinois, Progressive of March 4th as follows: "The recent so-called school survey by Profs. Jones, Clement, Clerk and Washburn was made in just 160 minutes by the clock. Think of it, a three months' job was done in 160 minutes! In that time they visited from three to fifteen minutes in some rooms, looked through the glass doors into others, and failed to visit some teachers altogether. The work of 1000 pupils and 40 teachers was surveyed in 160 minutes."

—A California school board fired a teacher because she bobbed her hair. The young woman claimed that pruning her hair did not reduce her brain power. This statement of the case was accepted at Los Angeles where she is now employed in the schools.

Important Developments Affecting the Planning of School Buildings*

Samuel A. Challman, State Inspector of School Buildings for Minnesota.

Our demands today as to the use of our school buildings are numerous and varied. The major problems connected with their planning involve an intelligent appreciation of the educational program of the community with regard to the child as well as to the adult. The main factors which enter into this program are very much the same in all communities, though there is considerable difference in the scope of the activities undertaken. On this account, provision must be made in the physical plant to a greater or less degree for the promotion of the various objectives. In most schools objectives overlap each other and the same features may well serve more than one of the desired ends. But they add to the complexity of the problem and require careful adjustments in each new undertaking.

How to translate these objectives into facilities which will make possible their consummation in an economical manner is a question which arises with the planning of each new school building. Whether all of them can be incorporated into the building immediately contemplated or some of them must be deferred until later on when sufficient funds are available, does not alter the problem, for if not incorporated to begin with, they should nevertheless be considered in the general plan and provision made for such addition or additions as will ultimately result in their inclusion. The ability with which we handle such a problem determines the extent to which we have advanced in our efforts to fit the building to the educational purposes for which it is to be erected.

Thoughtful Consideration for Safety

That we have made some notable progress is evident from the criteria established within the last decade. Many economies as to space for various purposes have been effected. More intelligent thought has been given to features involving the conservation of children's eyesight by natural as well as artificial illumination. More care is exercised in safeguarding the lives of pupils and greater precautions are taken to prevent destruction of buildings by fire. Decided improvements have been made in sanitary conditions, in consequence of which health has been promoted and a higher standard of living established.

As to economy of space, it may be said to have accomplished two very important results: 1. It has given us classrooms, corridors, and stairways of usable dimensions without any loss of advantages previously enjoyed. 2. It has saved each district, erecting a building under new conditions, a respectable amount of money.

By limiting the width of our classrooms to not exceeding 23 feet, shorter spans have reduced construction costs. Limiting the length of the standard classrooms to the actual space necessary for school desks and aisles, so as to have rooms of definite capacities, has resulted in a material reduction of sizes of these rooms and a consequent saving of money both for their construction and subsequent upkeep. A study of some of our older buildings shows quite conclusively that, if the unnecessary space in several rooms could be utilized and brought together, we could frequently gain a new classroom out of wasted space in from eight to ten rooms.

And not only have classrooms been subjected to a critical investigation of this kind, but special rooms for industrial training, commercial subjects and other specialized instruction have also received careful attention. In some instances affecting these special rooms greater space than before allotted has been found necessary in order that proper equipment for a definite number of pupils might be provided and advantageously located. This has increased costs, but it has improved conditions for instruction which, after all, is the proper basis on which to measure the efficiency of a building.

Reducing Width of Corridors

Main corridors, in all but very large buildings, of which only a comparatively small number are erected, have been reduced to ten feet in width. Ten years ago, it was unusual to find a school building with a corridor less than twelve feet wide, and a width of fourteen to sixteen feet was not uncommon. The reduced width has resulted in no inconveniences, as four lines of pupils can readily pass down such a corridor at one time, and more than four lines is likely to result in confusion and congestion at certain points. Secondary corridors are generally made narrower than ten feet and their width is determined by their length and the number of doors leading to them. Corridors should insure the safety of the occupants in the building, and, in order to accomplish this, irregular corridors with offsets and changes in direction have been entirely eliminated. Only straight corridors with turns at right angles and stairways at or near the turn are accepted as meeting modern requirements for safeguarding the lives of pupils.

Stairways have been increased in number in order to do away with fire escapes, which too often are useless and quite frequently perilous. No building, however small, of two stories or more, is safe with less than two stairways separated as far from each other as conditions will permit. One stairway for every 160 pupils is the Minnesota standard at the present time, and in case of fire or panic, it is almost certain that it will not be considered too stringent. But while the number of stairways has been increased and hideous fire escapes eliminated, the width of stairways has been materially reduced. It is generally conceded that no stairway in an elementary school need be more than four feet wide and it is a question if three feet six inches would not be just as serviceable and possibly safer. Only two pupils should be permitted to come down abreast, and each pupil should have the support of a handrail. The only question, therefore, is the amount of space two pupils require in going up or down a stairway without retarding each other. In high schools, the width now generally found is five feet, and even there, it is a question whether a narrower stairway would not be an advantage. Stairways are now almost without exception in two runs from story to story with not more than sixteen risers to the run. Six inches is the general height of risers in elementary schools while seven inches is the usual standard in high schools.

Stairways and corridors in most school buildings occupy from fourteen to twenty per cent of the total floor area. Administrative rooms require from eight to twelve per cent of the floor area. Walls and partitions call for from seven to ten per cent, and heating and ventilation for from two to five per cent—leaving from fifty to sixty per cent for classrooms, industrial rooms, library, auditorium and gymnasium. It is quite evident, when we realize that from forty to fifty per cent of the floor area will have to be set aside for construction, mechanical equipment, administration and movement about the building, that the one-half to three-fifths of the building remaining will require very careful attention in planning, if satisfactory results are to be obtained.

Economic Division of Space

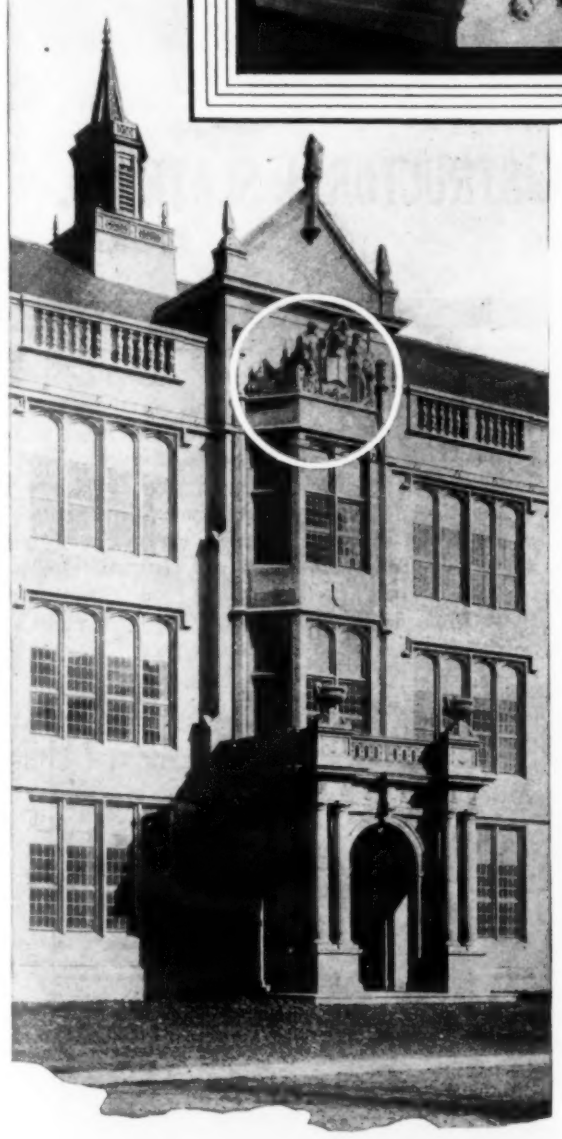
In the elementary school, all of this space may be devoted to classrooms with five or six per cent given over to physical training and a small assembly room. In the high school, however, we find that, for a full educational program, we are unable to set aside much more than approximately thirty per cent for classrooms, since we will need ten to twelve per cent for gymnasiums, eight to ten per cent for an auditorium, and from six to twelve per cent for industrial training.

These rather general ratios point to the necessity of making as full use as possible of all rooms in the building. It is manifestly impossible to get one hundred per cent use out of all rooms, but if every superintendent and

(Concluded on Page 70)

*Address delivered March 6, 1924, at 4 P. M., before Minnesota School Board Association in House Chamber, State Capitol, St. Paul.

CENTRAL HIGH SCHOOL, WASHINGTON, D. C.
(U. S. Army Air Service—Through Fairchild Aerial Camera Corp.)



AN INTERESTING EXAMPLE of the adaptability of Indiana Limestone to sculptural treatment is shown in the illustration of the Carved Group which terminates the bay over the main entrance of the Education Building, University of Illinois, at Urbana, of which James M. White is the Supervising Architect.

The figure holding the sphere symbolizes Science and the one with the lyre represents the Arts. Between them is the Book of Knowledge, of which Science and Art are the sponsors. The Lamp of Learning is so located as to illuminate the Book of Knowledge.

Symbolic figures in Indiana Limestone used in buildings of the same material afford ornamentation that maintains harmony of design, and furnish a means of expressing perfectly the ideals for which a building stands.

The Pyramids remain today as permanent evidence that limestone is the world's most enduring building material.

Our handsomely illustrated booklet which tells the story of Indiana Limestone will be sent free upon request. Address, Indiana Limestone Quarrymen's Association, Box 780, Bedford, Indiana.

BUILD THE NATION SECURELY WITH

INDIANA LIMESTONE

The NATION'S BUILDING STONE

(Concluded from Page 68)

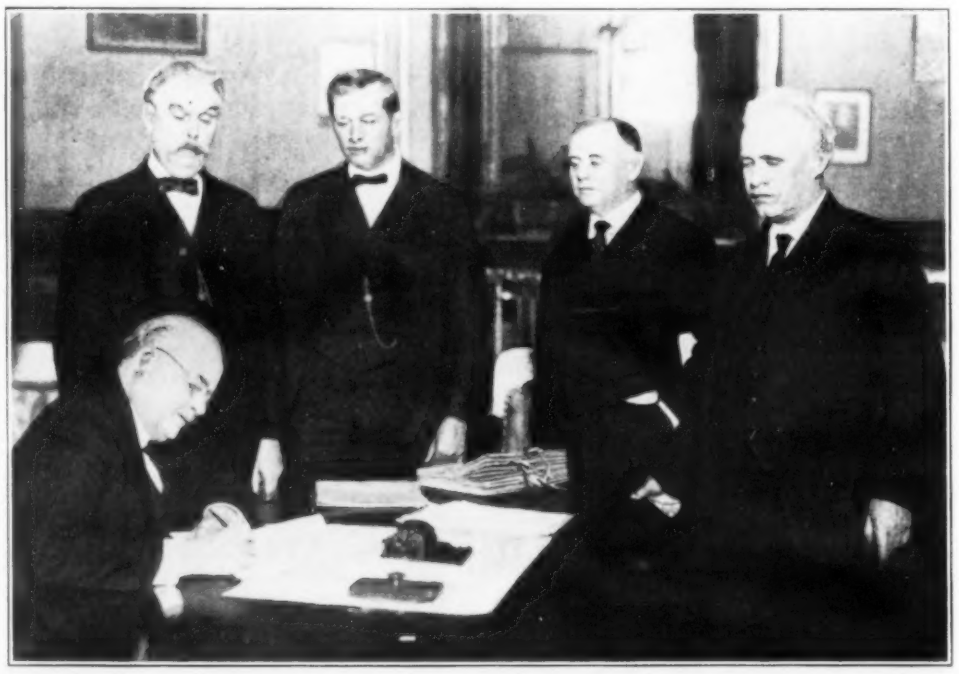
principal would chart his own building so as to show the actual use of the space during each day, it would be a decided help to a school board in seeking to determine the extent of the educational program of the community.

During the last few years much attention has been given to costs of school building, and data have been prepared by various architects and by a number of city school officials. From such data as have been submitted to the Division of Buildings and Sanitation of the Minnesota State Department of Education, it would appear that the cost of non-fireproof buildings in Minnesota erected during the last two years has varied from eighteen cents per cubic foot to thirty cents and the cost of fireproof buildings for the same period from 22.8 cents to 30.8 cents. It must be remembered that cubic foot costs are not always on a strictly comparative basis, since rooms differ in height in most buildings, but at the same time, they constitute the most generally recognized basis for computing building costs.

New Angles on Cost Items

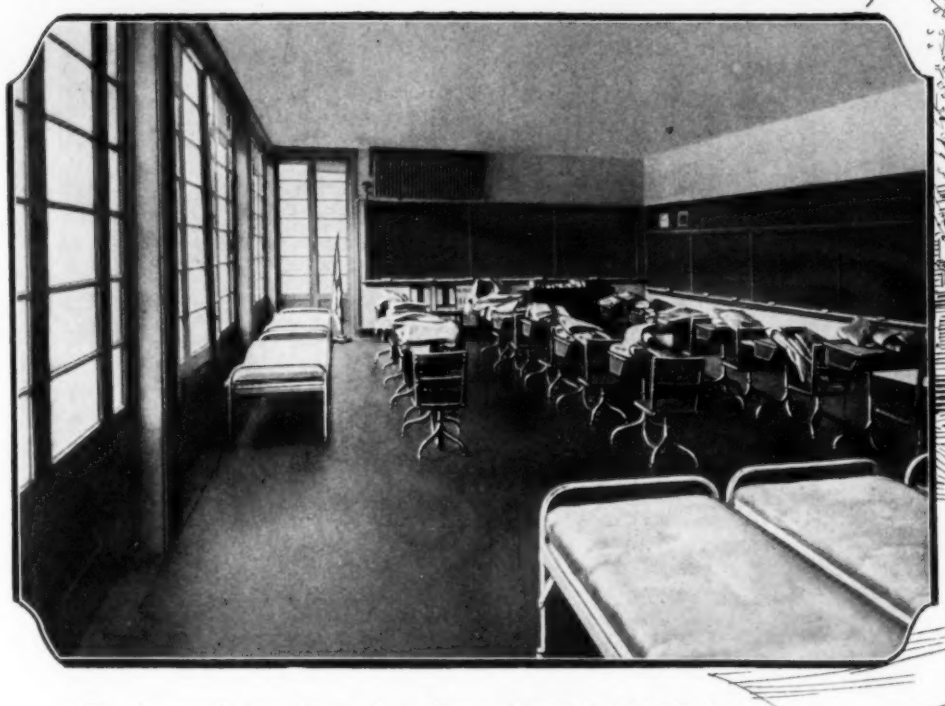
Another interesting angle as to costs is found in the way in which they are distributed in a completed building. Using the customary classification of four main groups, the reports submitted for Minnesota school buildings for the year 1923 show that the general contract constitutes from 70 to 76 per cent of the total cost, the heating and ventilating contract from fifteen per cent to twenty per cent, the plumbing contract from four per cent to nine per cent, and the electric wiring from two per cent to five per cent.

The importance of these developments to us in Minnesota are probably much greater than we at first realize. As we think of them merely in connection with some local enterprise their effect may appear small. But when we stop to consider that new buildings costing approximately $12,000,000 were completed during 1923, and that the value of our public school buildings has almost trebled in the last ten years, jumping from $40,961,835 in 1913 to $117,666,835 in 1923, the magnitude of our school building program is really astounding. Any new development, therefore, is likely to have a decided influence upon a large number of communities each year, and affect vitally thousands of children as well as adults. When we further consider that these buildings will in all likelihood be used for an average period of at least fifty years, the significance of what is done or left undone becomes all the more a matter of serious concern to every school official who endeavors to discharge the trust imposed upon him in an efficient and creditable manner. His task is one that calls for an open mind and the exercise of good judgment.

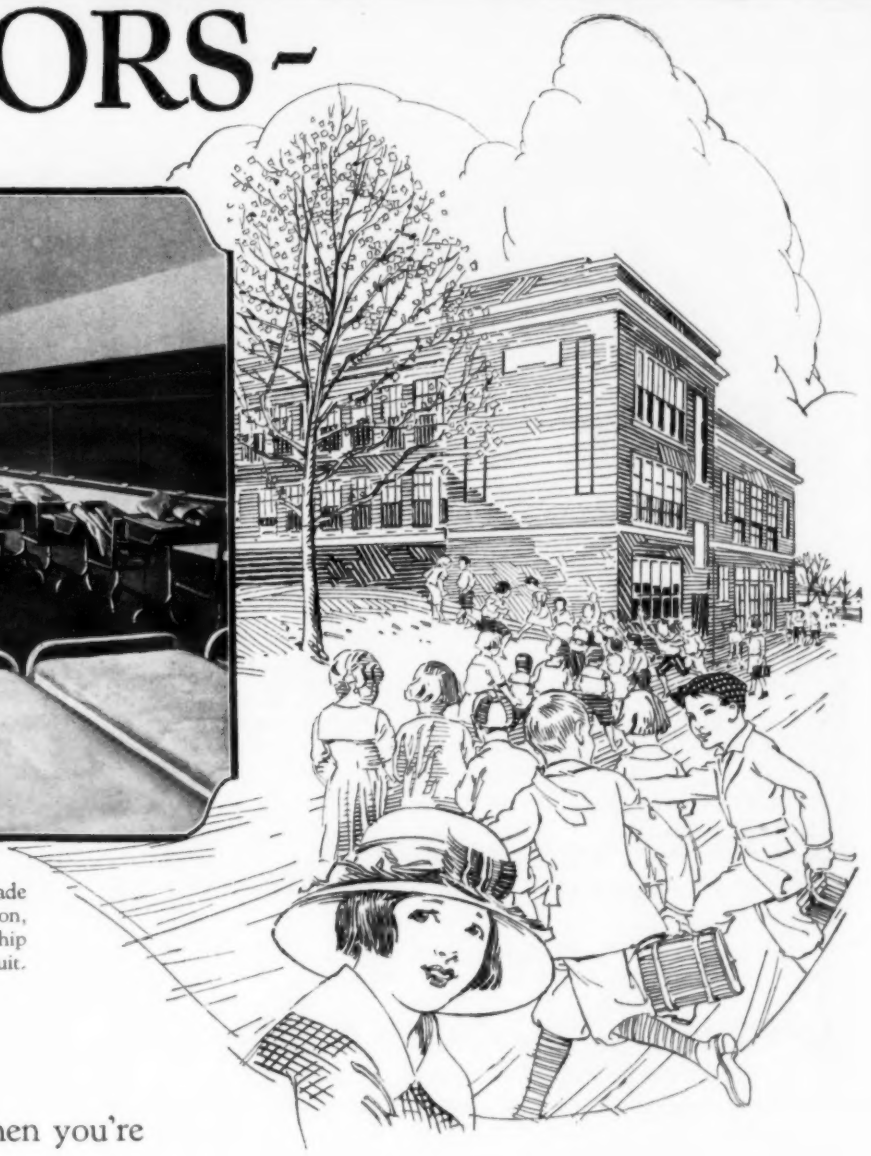


THE GOVERNOR OF SOUTH CAROLINA SIGNS A 6 TO 1 SCHOOL GUARANTEE.
In this photo Governor Thomas B. McLeod is shown signing what is known as the 6-to-1 School Bill, providing for a radical departure from the system that has been in use in the state. The act provides that the state guarantee salaries of all school teachers for six months each year, providing that the districts guarantee the same scale for one month, thus insuring to every school a term for at least seven months. From left to right, standing, are Representative Tom C. Hamer, Marlboro; Senator J. A. Spruill, Chesterfield; Senator R. S. Rogers, of Dillon, and W. A. Shealy, Assistant Superintendent of Education. (International News Reel, Photo.)

CLEAN FLOORS -



The photograph shows the Fresh Air Room of the Sixth Ward Grade School in Ann Arbor, Michigan. Architect: Louis Holmes Boynton, Ann Arbor. The floor is sanitary, quiet, resilient *Gold-Seal* Battleship Linoleum — one of the several types of Bonded Floors particularly suitable for schools.



The best is none too good — when you're selecting the floor of your school!

For a school floor has to meet so many requirements — comfort, beauty, durability, economy. Most important of all, it must be clean—easy to keep sanitary, free from disease-laden germs and dust.

In choosing the floor that has all these varied qualities you need the advice of flooring experts — men familiar with the flooring needs of every type of building.

Just this kind of assistance Bonded Floors Company is prepared to give you without charge and entirely without obligation. Our flooring engineers — experts of many years' experience—are at your disposal for consultation on any phase of your floor problem.

And this is but one form of the service of Bonded Floors Company, which includes scientific installation of the highest grade flooring materials, skilled workmanship and a guaranty bond protecting you against repair expense!

A Surety Bond with Every Floor

Final assurance of floor satisfaction is the Surety Bond issued by the U. S. Fidelity and Guaranty Company, which goes with every floor laid according to Bonded Floors specifications. The bond insures freedom from repair expense due to defects in materials or workmanship.

BONDED FLOORS COMPANY, Inc.

Division of Congoleum Company, Inc.

Manufacturers · Engineers · Contractors

Main Offices: 1421 Chestnut Street, Philadelphia, Pa.

New York · Boston · Philadelphia · Newark · Pittsburgh
Detroit · Chicago · Kansas City · San Francisco · Los Angeles

(Distributors in other principal cities)

BONDED FLOORS

The following types of resilient floors are installed by this company and bonded by the U. S. Fidelity & Guaranty Company:—*Gold-Seal* Battleship Linoleum, *Gold-Seal* Treadlite Tile, *Gold-Seal* Cork Carpet, *Gold-Seal* Rubber Tile, *Gold-Seal* Natural Cork Tile

SCHOOL LAW

THE OREGON SCHOOL CASE DECIDED

The test case of the Oregon law whereby private and parochial schools were to be abolished was decided by the circuit court at Portland, by pronouncing the law unconstitutional.

The opinion of the three judges defended the right of private schools to exist in the state, holding that "their privilege to teach grammar grades must be regarded as natural and inherent." The court further said: "It cannot be successfully combated that parochial and private schools have existed almost from time immemorial—so long, at least, that their privilege and right to teach grammar grades must be regarded as natural and inherent, as much so as the privilege and right of a tutor to teach the German language in the grammar grades, as was held in Meyer vs. Nebraska supra.

"The absolute right of these schools to teach in the grammar grades (paraphrasing somewhat the language of the court in the case just cited), and the right of the parents to engage them to instruct their children, we think, is within the liberty of the fourteenth amendment.

"The right of the state to establish as its school policy compulsory education within its boundaries is conceded. But no state has ventured so far as to eliminate parochial and private schools."

SCHOOL LAW

Creation, Alteration, Existence and Dissolution of Districts

—Whether a community high school district is compact and contiguous, as required by law is an issue of fact.—People v. Keys, 141 N. E. 722, Illinois.

—The Illinois laws of 1921, p. 799, validating community high school districts does not apply, unless the territory involved in the district is compact and contiguous.—People v. Keys, 121 N. E. 722, Ill.

—The Illinois Laws of 1921, p. 799, validating high school districts, is inapplicable to a district legally organized under a valid statute.—People v. Keys, 121 N. E. 722, Illinois.

—The fact that portions of the territory within a high school district are part of other communities for trading or other purposes is not an avoidance, if the district constitutes in itself a community for school purposes.—People v. Keys, 141 N. E. 722, Illinois.

—To satisfy constitutional and statutory requirements as to compactness and contiguity, school districts must be such that children can attend with reasonable convenience.—People v. Crawford, 141 N. E. 725, Illinois.

—Evidence is held to show community high school district not compact or contiguous, as required by the Illinois Constitution, art. 8, § 1, and School Law, § 89a.—People v. Crawford, 141 N. E. 725, Illinois.

—In view of the intent of the Legislature in the South Dakota Laws, 1921, c. 202, § 125, to give the common school districts embraced within a consolidated district, that includes an incorporated town or city, an opportunity to withdraw from such consolidated district upon the vote of 75 per cent of the electors thereof a petition signed by 40 per cent of the electors of each of the common school districts as they existed prior to the consolidation praying that such districts be permitted to vote separately on the question of abandoning the consolidated district, should be granted.—Odson v. Rogers, 195 N. W. 1019, S. D.

Government, Officers and District Meetings

—Under the Connecticut School Law though school committees are agents of the law and not of the town, in their formal action they are governed by the law applicable to town, officials or boards.—Lucier v. Town of Norfolk, 122 A. 711, Conn.

—Under the Michigan Law, no call or notice of matters to be voted on is necessary to validate action taken at the annual school district meeting held at the time fixed by statute.—Commercial State Bank of Shepherd v. School Dist. No. 3 of Coe Twp., Isabella County, 196 N. W. 373, Mich.

—Under the Missouri law where irregularly elected directors of a consolidated school district organized as a board and carried on the business of the district for nearly two years without objection, they were de facto officers, and directors elected by them to fill vacancies were legally elected.—State ex inf. Barrett ex rel. Cutler v. Foxworthy, 256 S. W. 466, Mo.

District Property, Contracts, and Liabilities

—Under the Massachusetts law a written communication by school committee of the city of Newton to the board of aldermen, in stating the locality and nature of further provision for schools, is held a substantial compliance with Statutes 1897, c. 283, § 23.—Byfield v. City of Newton, 141 N. E. 658, Mass.

—The Nebraska Complete Statutes of 1922, § 6276, authorizes the county superintendent to determine the location of school site only when no site can be selected by the electors of the district.—State v. Cruise, 196 N. W. 116, Neb.

—The qualified electors of a school district have no power to change a schoolhouse site at any annual or special meeting of the electors of such district unless notice shall have been given that such subject will be considered. Complete Statutes of 1922, § 6270.—State v. Cruise, 196 N. W. 116, Neb.

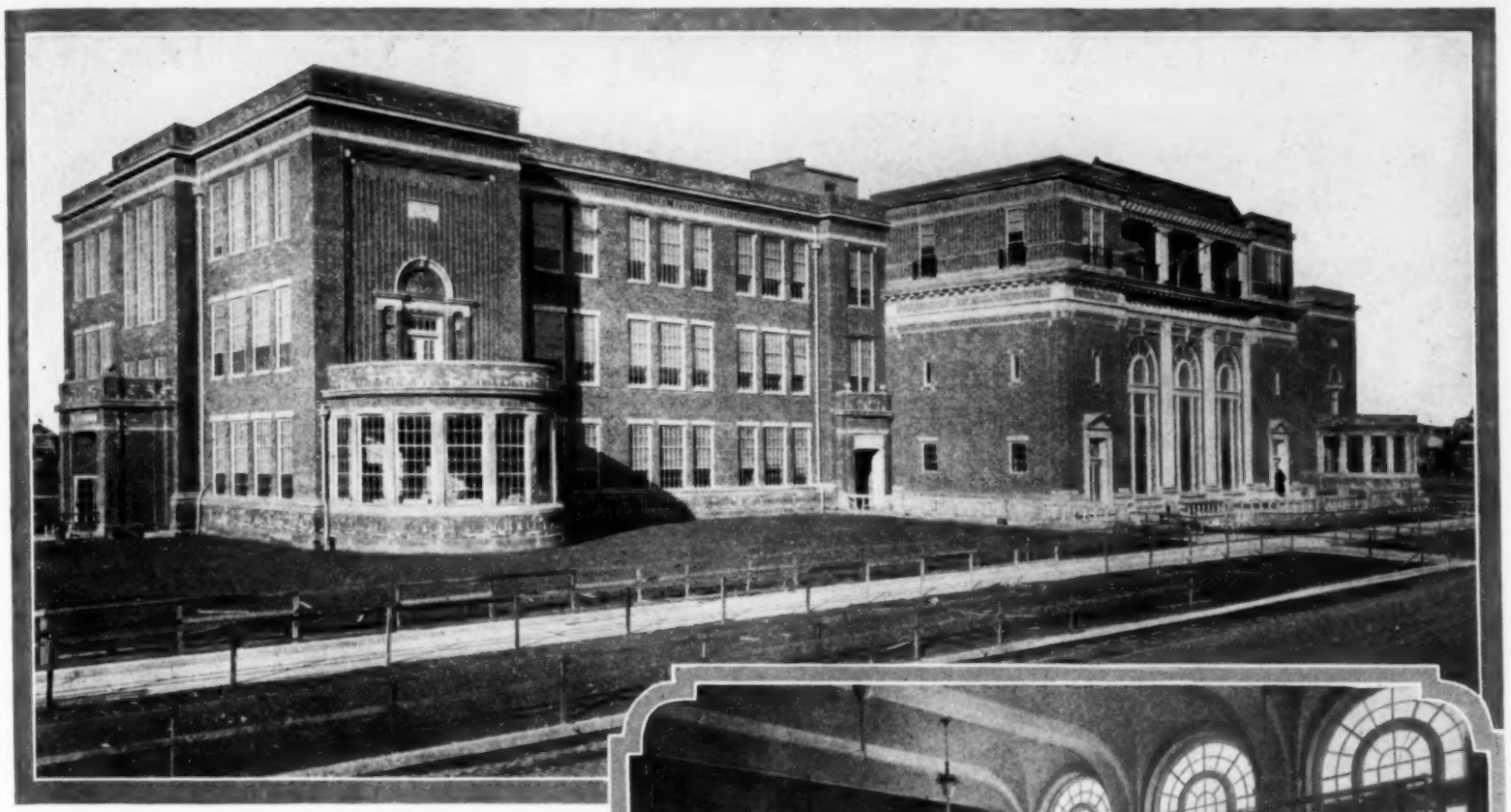
—Change of proposed schoolhouse site held not beyond the powers vested in a board of education or so unreasonable as to amount to an oppressive and manifest abuse of discretion, conferred upon it by N. C. Pub. Laws, 1923, c. 136, § 60 et seq.—School Committee of Seventy-First Consol. School Dist. v. Board of Education of Cumberland County, 120 S. E. 202, N. C.

—A school committee must act within its statutory powers to bind the town; hence, any one dealing with such a committee must inform himself of the scope of its authority and of the terms of its actions.—Lucier v. Town of Norfolk, 122 A. 711, Conn.

—A bid for the erection of a schoolhouse costing more than $500 which separately states the labor and material and the total thereof at the same amount is in violation of Ohio Gen. Code, § 7623, subds. 5-7, and is void.—Perkins v. Bright, 141 N. E. 689, Ohio.

—Where school district had power to sell lands, but a sale was invalid because of irregularity, it, with permission of the commissioner's

(Continued on Page 74)



South Junior High School,
Huntington, W. Va.
Meanor & Handloser,
Huntington, Architects.
Harrison Smith,
Huntington,
General Contractor

Daylight + Ventilation = Healthy Children

Daylight, sunlight and fresh air are more important in a school than any subjects in the curriculum.

When these health necessities are introduced in the right volume in the schoolroom, halls and gymnasium, you have thrown around pupils and teachers a protective measure which goes far toward combating disease.

Truscon Steel Windows, because of their many features of construction, are ideal windows for schools and colleges. They are made of steel which means fireproofness and permanence. They are easily opened or closed, which means greatest utility and service. Standardization in manufacturing insures low first cost, careful workmanship means a saving in maintenance or upkeep cost.

The illustration of the South Junior High School shows Truscon Projected Windows, which operate entirely outside the sash frame. When partially open the glass acts as a canopy for protection against inclement weather. Other styles are made for various types of schools.

School architects, school superintendents and members of school boards should get detailed information on these windows for schools.

A corps of daylight engineers in 48 cities is at your service to co-operate with you without obligation on your part. Write us for further information.

TRUSCON STEEL COMPANY

Youngstown, Ohio.

Warehouses and sales offices from Pacific to Atlantic
For addresses see phone books of principal cities
Canada: Walkerville, Ont. Foreign Div.: New York

TRUSCON
TRUSCON STEEL CO.
STEEL WINDOWS

(Continued from Page 72)

court, having received purchase money and used it for school purposes, thereby ratified the sale and cannot recover the land.—Mecom v. Ford, 256 S. W. 701, Texas Civil Appeal Court.

District Debt, Securities, and Taxation

—Evidence that, after repairs to a school building amounting to $2,500, the insurance was increased from 1,000 to 3,000 without evidence of the former value of the building, or that the insurance approximated its value, or that any money spent, except for repairs held to show the erection of a new schoolhouse, within Mich. Pub. Act, 1919, No. 43, relative to borrowing money and issuing bonds for construction of new buildings, so as to invalidate notes given by the district board.—Commercial State Bank of Shepherd v. School Dist. No. 3 of Coe Twp., Isabella County, 196 N. W. 373, Mich.

—Where the school district board voted money to repair and make usable the schoolhouse, and the treasurer reported expenditures to the annual meeting, which voted to give new notes to pay notes given by the board to a bank for a loan, such notes were ratified, and constituted binding obligations under Mich. Comp. Laws, 1915, § 5667, subds. 6 and 7, authorizing the annual meeting to vote taxes to build schoolhouses, etc.—Commercial State Bank of Shepherd v. School Dist. No. 3 of Coe Twp., Isabella County, 196 N. W. 373, Michigan.

—Where the resolution of a board of education recited that a petition presented for the holding of an election under the N. C. Pub. Loc. Laws, 1915, c, 722, for issuance of school bonds, was signed by more than 25 per cent of the voters in the district, and a similar resolution of the board of commissioners, were in due form, the resolutions were prima facie correct, and, in the absence of allegations tending to impeach their validity, evidence as to how the two boards arrived at their conclusions was not admissible, in a suit to test the validity of the bonds.—Waters v. Board of Com'rs of Buncombe County, 120 S. E. 450, N. C.

—Where the G. school district was consolidated with a consolidated district which had previously voted to issue bonds under the N. C. Pub. Laws, 1920 (Ex. Sess.) c. 87, and an election was held in the G. district to ascertain whether the taxpayers therein would assume payment of their part of the taxes necessary under the N. C. Const., art. 7, § 7, which resulted in favor of assumption of the debt, the bonds will be a valid obligation of the consolidated district including the G. district.—School Committee of Seventy-First School Dist. v. Board of Education of Cumberland County, 120, S. E. 202, N. C.

—Where certificate of levy for school taxes, not dated, was signed by president and clerk of school board, and record book kept by the clerk of the board showed a page thereof torn from the book, it cannot be said that levy of taxes thereunder was not supported by sufficient evidence, where the lost page was produced in court by the clerk, who identified it under oath, and testified that it was torn from the book for the use of an attorney.—People v. Chicago, M. & St. P. Ry. Co., 151 N. E. 827, Ill.

—It is not necessary that the president and clerk of a school board be authorized to sign and file a certificate of levy for taxes; that being simply an official authentication of the action of the board.—People v. Chicago, M. & St. P. Ry. Co., 141 N. E. 827, Ill.

—Where school board met as shown by minutes, and by unanimous vote decided that it needed all the money possible to raise in the district for school purposes and decided to levy the limit, but did not know at the time what the limit was, a subsequent levy was not invalid by reason of the filling in by the clerk of the figures in the minutes of the meeting designating the amount in dollars and cents, and the subsequent execution of a certificate by the president and clerk; the filling in of the figures and the execution of the certificate being in exact accordance with the will and action of the board.—People v. Chicago M. & St. P. Ry. Co., 141 N. E. 877, Ill.

Teachers

—A contract between a district board of education and a school teacher, executed by the president of the board by its direction, is held not invalid because the district supervisor was not present at the board meeting, and made no recommendation concerning the teachers employed, especially where the resignation of the supervisor had been requested, and was in the hands of the board for action therein.—State v. Board of Education of Clark Dist., Harrison County, 120 S. E. 183, W. Va.

—Under W. Va. Code, c. 45, § 57, a district board of education may legally employ teachers for the ensuing year prior to July 1, and where a meeting of the board is held in June, on the customary day for the regular monthly meetings at the usual place, the president, secretary, and all members being present, and teachers are appointed, and the president is directed to execute formal contracts, which are filed with the secretary, such contracts are not void because the board had not, at its first meeting in July in the year previous, fixed the time and place of regular meeting, as prescribed in Section 45.—State v. Board of Education of Clark Dist., Harrison County, 120 S. E. 183, W. Va.

—A teacher cannot be employed unless she has received a teacher's certificate, but where such certificate has been issued, and the board of education knows the fact, and so states in the contract, the contract is not void, because the certificate does not accompany it, when tendered to the secretary of the board for his signature and for filing.—State v. Board of Education of Clark Dist., Harrison County, 120 S. E. 183, W. Va.

—It is not necessary that a teacher make formal application in writing for employment to the board of education, but any member of the board, or any other person for her, may make informal application, and a contract to teach, duly entered into between the teacher and the board is not void for want of written formal application.—State v. Board of Education of Clark Dist., Harrison County, 120 S. E. 183, W. Va.

—Where a board of education has legally appointed and employed a teacher, and the contract in the form prescribed by the state superintendent has been signed by the president at the direction of the board, and by the teacher, the duty of the secretary to sign the contract and to file it is ministerial, and he has indiscretion; his refusal not rendering the contract void. State v Board of Education of Clark Dist., Harrison County, 120 S. E. 183, W. Va.

Pupils and Conduct and Discipline of Schools

—In an action for breach of a contract to employ plaintiff to transport children to school, the vote of the school committee purporting to award plaintiff such a contract at a daily rate instead of a weekly rate was admissible over plaintiff's

(Concluded on Page 77)

(Concluded from Page 74)

objection that he was not present at the meeting nor notified to be present.—Lucier v. Town of Norfolk, 122 A. 711, Conn.

—Where a notice for bids for the transportation of children to school, under Conn. Gen. statutes, 1918 §§ 836, 982, 998, called for bids by the day, plaintiff submitted a bid of $175 a week, and the school committee adopted a resolution purporting to award a contract to plaintiff for $35 a day, there was no meeting of the minds. Lucier v. Town of Norfolk, 122 A 711, Conn.

—If a local board of education in a local school district fails to provide sufficient school privileges, including high school branches within four miles of the residence of each child of compulsory school age in the district, or to have such branches accessible by transportation or by furnishing board and lodging within a district offering such branches, under the Ohio General Code § 7610-1, a mandatory duty rests on the county board of education of the county to which such district belongs to perform the acts necessary to provide such high school branches, or to make them accessible in view of sections 7731, 7731-7749, 7762-6, 7763, 7763-1, 7764, and 7764-1, State v. Beamer, 141 N. E. 851, Ohio.

—Under the South Dakota Laws of 1921, c. 206, amending Rev. Code, 1919, § 7485, providing as to children not satisfactorily transported that "it shall be the duty of the district school board to make such provision for the schooling of such children as shall be determined by the county superintendent." It is within the superintendent's power to determine what provision shall be made, and arrange all the details himself, and the board must make the provision determined by him.—Mendenhall v. Slim Buttes School Dist. No. 4, Harding County, 196 N. W. 97, S. D.

—If, pursuant to S. D. Laws, 1921, c. 206, amending Rev. Code, 1919, §7485, the county superintendent merely directed that plaintiff's children be placed in a certain school, and that the district school board carry out that order, the board could have arranged the details for carrying out the directions, but in choosing to arrange all of the details herself by making an order to the board to pay $20.00 a month for the board of each of plaintiff's four children the county superintendent did not exceed her power. —Mendenhall v. Slim Buttes School Dist. No. 4, Harding County, 196 N. W. 97, S. Dakota.

LEGAL NOTES

—The socalled rural school bill under consideration by the New York state legislature, providing for consolidated schools met with decided opposition in the part of the farmer element. George Howden of Ballston Lake, red shirted and white whiskered, started a stampede by saying: "I want to record myself," he said. "I got to get home to do the milking. The trouble with these teachers is they want more money and a place for their Friday night dances on Monday, Tuesday, Wednesday, Thursday and Friday. If you don't believe me, come on outside and we'll have an argument." The bill has the support of State School Commissioner Frank P. Graves and leading educators of the state.

—The New York state legislature has under consideration a measure whereby youthful delinquency will be blamed upon the parents. Parents are to be held responsible for children that associate with criminals, that grow up in idleness, that solicit alms, that are truant, or do anything that may contribute to delinquency.

—The authorities of the normal school at Ypsilanti, Michigan, expelled Miss Alice Tanton for cigarette smoking. Miss Tanton brought suit contending that there was no rule against cigarette smoking. The supreme court of the state decided in favor of the school.

—According to the present law in Iowa, directors of independent school districts are not permitted to make contracts with school superintendents until they have served for a period of one year. An amendment before the legislature seeks to reduce the period to seven months.

—The Mayor of Macomb, Ill., has notified the city treasurer and banks not to honor school board orders. The mayor's warning came when school board members who have exhausted this year's appropriation had County Treasurer Douglass advance $15,000 to City Treasurer Bailey. Without such anticipation of next year's funds, Macomb's schools cannot continue to operate school board members say.

—Legal action has been taken at Wapakoneta, Ohio, to oust Ross Turner and William Switzer from the Hardin County board of education. They were elected last November, but did not take oath of office until half an hour after they had participated in the first meeting of the board in January. The prosecutor therefore says that they are not legally qualified to hold the office and asks that they be ousted.

—The legislature of New Jersey did a graceful thing when it voted a pension of $2,500 to the widow of the late Henry Snyder, superintendent of the Jersey City schools.

—A bill to prohibit the use of school histories that were belittling the Declaration of Independence was defeated in the New Jersey legislature. It was believed that boards of education are competent to judge the undesirability of textbooks.

A bill to reduce the Providence board of education from 33 to five members, as recommended by Dr. George D. Strayer, was defeated by the Rhode Island legislature. The city council of Providence has also voted against the proposed change.

—Senator Capper has introduced a compulsory school measure for the District of Columbia. "Conditions are worse here in Washington than in any other American city of similar size that I have heard of in regard to the enforcement of compulsory education," he said. "There is a law now on the statute books, but it appears to be ineffective and there is not the needed machinery to see that the children of the district attend school."

—The school legislation at Albany, New York, receives attention at the hands of the Public Education Association of New York City in a recent bulletin which the efforts in behalf of salary raises are denounced as follows:

"Obviously this unseemly scramble for salaries is as improper as the scramble for jobs which we have so frequently criticized. Relative merit and fair consideration of all concerned, rather than political opportunism, should be the guiding principle in both instances. Both require a thorough appraisal of the facts and disinterested justice to everyone. Both require the substitution of professional vision and leadership for narrow self-seeking and political expediency. If the schools are to retain public respect and support, professional action based on sound professional standards must supplant political manipulation."

SCHOOL FINANCE AND BUILDING

A SCHOOL ACCOUNTING SYSTEM FOR INDIANA

Edwin N. Canine, Chairman of Committee

Comparative cost figures have been very unreliable because there has been no uniformity in school accounting. It has been impossible to make accurate comparisons of costs between school corporations within the state or with those of other states. People who pay taxes are questioning not only school but all other expenditures. They have a right to know all the facts. The school official owes this to the people who support and patronize the schools. He owes it to himself to have these facts and to be able to explain all his recommendations or actions.

Accurate and uniform accounting may or may not save money to a school corporation. It will enable officials and patrons to know exactly what they are doing, what others under like conditions are doing, and enable them to formulate their policies intelligently and therefore, economically. Economy might require the expenditure of more rather than less money.

In order that comparisons may be made with other states, the Indiana Accounting System will follow rather closely that adopted by the National Superintendents' Association, as modified and used by the Commissioner of Education. This applies to both **fiscal** and general **statistical** accounting. Since Indiana has several distinct funds, requiring a fund accounting system, some variations will be necessary. Other changes are made to comply with state laws and conditions.

The proposed plan provides first for a detailed budgeting system. The items correspond exactly with those in the Disbursement Ledger, and in the yearly report, enabling the school official and the taxpayer to estimate very intelligently. This description is quoted from the handbook of instruction: "The plan recognizes the existence of eight general classes of school expenditures: Administration, Instruction, Operation, Maintenance, Fixed Charges, Coordinate and Auxilliary Activities, Debt Service, and Capital Outlay. Ledger accounts are set up for each of these classes. A separate form is designed for use in each account. The general accounts are broken up into a number of subdivisions. These accounts, with their subdivisions, provide for analysis of expenditures on three bases—the function, the object and the location. The function is indicated by the ledger page headings, the object by column headings, and the location (kindergarten, elementary, high school, etc.,) by ledger subdivisions."

The plan may be made very simple for the small city and township or as elaborate as any large city may wish, through subsidiary ledgers. The disbursement ledger is made up of loose leaves, fairly convenient in size. By the subsidiary ledgers a complete unit accounting system may be set up.

A complete set of forms is prescribed: Certified claim blank, payroll blank, claim docket, warrant in triplicate, depository withdrawal record, cash book, fund ledger, disbursement ledger, order blank, requisition blank, delivery blank, and store room records. A detailed inventory and record of all supplies and equipment, as well as real estate, is required. Interest on investment and depreciation of property are absolutely necessary to actual cost accounting.

By standardizing the reports and making the data fairly complete, the state officials and the committee hope to make unnecessary many of the questionnaires now sent out. We feel we must answer a few of them. Usually, it takes hours to re-vamp the information to fit it into the new form and it is not accurate when done. The school official should have the report printed and sent to all inquirers. It **should** answer **most** of the questions that anybody **needs** to ask.

A rather elaborate book of instructions is being prepared. August, 1924, reports will be made on the new forms and the system goes into effect fully on August 1, 1924. Mr. L. B. Job, Asst. State Superintendent of Public Instruction, and Mr. Edward Brennan of the State Board of Accounts, have devised and arranged most of the forms. They have been assisted by a committee from the Town and City Superintendents' Association. The members of the committee are: Supt. E. B. Wetherow of Laporte; Supt. W. A. Wirt, Gary, and Supt. Edwin N. Canine, Chairman, East Chicago. Mr. A. H. Bell, School Auditor of Gary, has given much time and valuable assistance to the committee. Dr. Frank M. Phillips of the Statistical Division of the Bureau of Education, and Mr. F. L. Shaw of the General Education Board, were present at one of the committee meetings and gave helpful suggestions. This system is intended to cover eventually, all statistical reports required.

A PROBLEM IN SCHOOL FINANCE

The city of Kent, Ohio, which has a school attendance of about 1,200 is wrestling with a serious financial shortage. The amount of money at command of the board is $18,585, less than the budget calls for. While the board has lopped off certain repair work amounting to something over $8,000 it must cut some more corners to the amount of $10,000. There are three possible ways to meet the shortage in operating expenses:

First: By cutting the salaries of teachers and janitors.

Second: By cutting the number of teachers, by increasing the number of pupils per teacher and cutting out special supervisors.

Third: By carrying on the present program with all economy possible and having only eight months of school next year.

As the city of Kent is considerably below the average salary paid to teachers in cities of this size, it would hardly seem just or practical to adopt the first method. This leaves the board with two ways of meeting the cut. **Which shall it be?** The answer seems to be that the third method suggested will have to be adopted.

At the same time Superintendent W. A. Walls, who has made a thorough study of the subject suggests a change in the methods of taxation. He holds that both personal and realty property assessments should be brought upon a hundred per cent basis. The realty is now assessed on a 60 per cent basis. Then, too, there are $34,000 in unpaid taxes.

WEST VIRGINIA SCHOOL FINANCES

—A survey of school property in eleven of the largest cities in West Virgina brings out the fact that for each child in school now there is invested in buildings and equipment $9,744. The investment per child is highest in Charleston where it reaches the sum of $11,500.

The total valuation of the school property in the cities considered is $526,874,875, and the enrollment at the opening of the last semester of this year was 54,070.

The bonded debt of these school systems is stated at $5,404,000. Charleston carries the heaviest bonded debt, more than half of the total debts reported for the state, $2,393,000. Charleston's debt is augmented by the 1923 issue of bonds for the erection of a modern high school building and other improvements. The issue was for $1,350,000.

The population of the cities is only 294,146 persons. A little figuring shows the debt per capita to be about $18.

Huntington stands first in the state in point of enrollment, and the total investment in school property. There are 11,569 pupils, and the school property is rated at $117,472,362. The city carries the second largest debt in the sum of $1,415,000.

Wheeling, the third in enrollment, has a debt of only $70,000. Elkins, with an enrollment of 2,045, carries no debt.

BUILDING AND FINANCE

—During 1923 a total of 145 new schoolhouses have been erected in Illinois, according to a recent report of the state education department. This was less than the number built during the two previous years. Of the entire number, eight are eight-room buildings, thirteen are more than eight rooms, and 34 are high schools.

—In connection with a general reorganizing of the high school system of Missouri, one of the new features is the enactment of standards governing the high school curriculum. Following are the leading requirements which must be met by the high schools of the state:

Each high school must have a sufficient number of properly furnished rooms to provide adequately for all regular class work and school activities.

All classrooms must be furnished with slate blackboards, book cases and other appointments.

An auditorium should be provided by each high school for school assemblies.

Each high school must have a room for laboratory work.

A room, equipped with book cases, tables and chairs must be maintained by every high school as a reading room.

The principal of each school shall have a private office.

In every large high school, a rest room must be maintained for teachers and students, which may be used by the school nurse or physician.

All schools must be equipped with sanitary drinking fountains, modern heating and ventilating systems and sanitary wash rooms.

—Governor Donahey of Ohio has advised the school officials of Alliance, where a deficit in school maintenance threatens the closing of the schools before the end of the term, that there exists no need for state aid.

The governor's advice is based upon a survey of the Alliance schools made by C. B. Ulrey, high school supervisor of the education department, which showed that the school system has employed too many teachers and supervisors. It is pointed out that instead of the schools being operated at a deficit of approximately $43,000, they may be as effectively operated on present funds and still have a surplus of nearly $20,000 in the treasury. The school system has money sufficient to operate the schools for eight or nine months, instead of the regular term of nine and one-half months.

Similar surveys made of the Crestline, Bellaire, Wadsworth and Galion schools showed small deficits this year but most of these schools will complete the term with reduced teaching staffs.

—Elgin, Ill. A comprehensive program to care for the needs of the future, and at the same time to relieve present housing conditions is proposed by the school board.

—Few, if any, Ohio schools will be compelled to close before the end of the school term because of lack of money, according to the state education department. Under a recent ruling, the department has $750,000 at its disposal for the aid of school districts reporting lack of funds. No data is available as to the number of districts requiring state aid.

—Johnstown, Pa. The school board has adopted a resolution under which it proposes to borrow $1,000,000 for school needs. A new junior high school will be completed and two further buildings will be erected.

—Rosenberg, Tex. The school board has been authorized to raise the tax rate ten cents per hundred dollars, or to a total of 60 cents. The increase became necessary because of a reduction of state apportionments during the past three years.

—Facing a lack of funds to complete the school term, the school board at Martin's Ferry, O., has made an appeal for an emergency fund of $10,000. Citizens have been asked to contribute to this voluntary financial fund.

—Under a recent rul ng of the Supreme Court of Ohio, school systems in Ohio may not borrow money to operate the schools nor can they participate in the state equalization fund, until an additional three-mill tax levy has been provided.

—According to a recent report of the state education department of Illinois, 46 counties have consolidated schools in operation. The total number of consolidated districts was 124, compared with 116 in 1922. Thirty-eight of the districts furnish transportation to the pupils. The total current cost of maintenance of consolidated schools for 1923 was $3,302,652.

—Chicago, Ill. Approximately $58,000,000 will be spent for the maintenance of the public-school system during 1924, according to the auditor of the school board.

—State Supt. Vernon Riegel, of Ohio, in commenting on the financial condition of the state's school systems, places the cause of the trouble on school boards who fail to adopt a budget and live within it. Under "extravagance" he placed such items as employment of more teachers than necessary; salaries covering more than the actual period of service rendered; excessive overhead, supervisors, clerks and business managers, and failure to make the teaching load what it might be in many cases. In connection with a movement for improving conditions it is pointed out that there is no effort made toward economy but the cry is always for more money.

(Continued on Page 82)

WEST VIRGINIA SCHOOL FINANCES

—A survey of school property in eleven of the largest cities in West Virgina brings out the fact that for each child in school now there is invested in buildings and equipment $9,744. The investment per child is highest in Charleston where it reaches the sum of $11,500.

The total valuation of the school property in the cities considered is $526,874,875, and the enrollment at the opening of the last semester of this year was 54,070.

The bonded debt of these school systems is stated at $5,404,000. Charleston carries the heaviest bonded debt, more than half of the total debts reported for the state, $2,393,000. Charleston's debt is augmented by the 1923 issue of bonds for the erection of a modern high school building and other improvements. The issue was for $1,350,000.

The population of the cities is only 294,146 persons. A little figuring shows the debt per capita to be about $18.

Huntington stands first in the state in point of enrollment, and the total investment in school property. There are 11,569 pupils, and the school property is rated at $117,472,362. The city carries the second largest debt in the sum of $1,415,000.

Wheeling, the third in enrollment, has a debt of only $70,000. Elkins, with an enrollment of 2,045, carries no debt.

BUILDING AND FINANCE

—During 1923 a total of 145 new schoolhouses have been erected in Illinois, according to a recent report of the state education department. This was less than the number built during the two previous years. Of the entire number, eight are eight-room buildings, thirteen are more than eight rooms, and 34 are high schools.

—In connection with a general reorganizing of the high school system of Missouri, one of the new features is the enactment of standards governing the high school curriculum. Following are the leading requirements which must be met by the high schools of the state:

Each high school must have a sufficient number of properly furnished rooms to provide adequately for all regular class work and school activities.

All classrooms must be furnished with slate blackboards, book cases and other appointments.

An auditorium should be provided by each high school for school assemblies.

Each high school must have a room for laboratory work.

A room, equipped with book cases, tables and chairs must be maintained by every high school as a reading room.

The principal of each school shall have a private office.

In every large high school, a rest room must be maintained for teachers and students, which may be used by the school nurse or physician.

All schools must be equipped with sanitary drinking fountains, modern heating and ventilating systems and sanitary wash rooms.

—Governor Donahey of Ohio has advised the school officials of Alliance, where a deficit in school maintenance threatens the closing of the schools before the end of the term, that there exists no need for state aid.

The governor's advice is based upon a survey of the Alliance schools made by C. B. Ulrey, high school supervisor of the education department, which showed that the school system has employed too many teachers and supervisors. It is pointed out that instead of the schools being operated at a deficit of approximately $43,000, they may be as effectively operated on present funds and still have a surplus of nearly $20,000 in the treasury. The school system has money sufficient to operate the schools for eight or nine months, instead of the regular term of nine and one-half months.

Similar surveys made of the Crestline, Bellaire, Wadsworth and Galion schools showed small deficits this year but most of these schools will complete the term with reduced teaching staffs.

—Elgin, Ill. A comprehensive program to care for the needs of the future, and at the same time to relieve present housing conditions is proposed by the school board.

—Few, if any, Ohio schools will be compelled to close before the end of the school term because of lack of money, according to the state education department. Under a recent ruling, the department has $750,000 at its disposal for the aid of school districts reporting lack of funds. No data is available as to the number of districts requiring state aid.

—Johnstown, Pa. The school board has adopted a resolution under which it proposes to borrow $1,000,000 for school needs. A new junior high school will be completed and two further buildings will be erected.

—Rosenberg, Tex. The school board has been authorized to raise the tax rate ten cents per hundred dollars, or to a total of 60 cents. The increase became necessary because of a reduction of state apportionments during the past three years.

—Facing a lack of funds to complete the school term, the school board at Martin's Ferry, O., has made an appeal for an emergency fund of $10,000. Citizens have been asked to contribute to this voluntary financial fund.

—Under a recent rul ng of the Supreme Court of Ohio, school systems in Ohio may not borrow money to operate the schools nor can they participate in the state equalization fund, until an additional three-mill tax levy has been provided.

—According to a recent report of the state education department of Illinois, 46 counties have consolidated schools in operation. The total number of consolidated districts was 124, compared with 116 in 1922. Thirty-eight of the districts furnish transportation to the pupils. The total current cost of maintenance of consolidated schools for 1923 was $3,302,652.

—Chicago, Ill. Approximately $58,000,000 will be spent for the maintenance of the public-school system during 1924, according to the auditor of the school board.

—State Supt. Vernon Riegel, of Ohio, in commenting on the financial condition of the state's school systems, places the cause of the trouble on school boards who fail to adopt a budget and live within it. Under "extravagance" he placed such items as employment of more teachers than necessary; salaries covering more than the actual period of service rendered; excessive overhead, supervisors, clerks and business managers, and failure to make the teaching load what it might be in many cases. In connection with a movement for improving conditions it is pointed out that there is no effort made toward economy but the cry is always for more money.

(Continued on Page 82)

(Continued from Page 80)

The cost of education in the state increased $10,000,000 in 1923, as compared to 1922.

—An appropriation of $15,000,000 has been made by the New York City board of estimate, bringing the total of school appropriations of the Hylan regime up to $130,000,000. Of the entire amount, $9,000,000 have been made available for immediate expenditures, and the remainder will shortly be at the disposal of the school authorities.

—The new high school at Irvington, N. J., will bear the name of the late Frank H. Morrell, superintendent of schools for the last 48 years.

—Radical readjustments in the building construction program of the school board at Grand Rapids, Mich., are proposed in accordance with changes in the board's personnel and a more conservative attitude on building expenditures. The proposed economies will no doubt extend beyond the building program and into the annual administrative budget.

—A reduction of the 1924 school budget by about a quarter of a million dollars has been demanded by the municipal officials of Syracuse, N. Y. School officials predict that such a movement will seriously handicap the administration of the schools.

—In a report recently issued by Supt. F. H. Beede of New Haven, Conn., the need of additional accommodations has been emphasized. It is predicted the proposed six junior high schools will be in use in ten to twelve years hence. At present there are 32 schoolrooms in which double sessions are held.

—The school board of Yakima, Wash., has taken up the matter of raising $30,000 for the completion of the building program of the school district.

—Mason City, Ia. Plans have been discussed for reducing the cost of operating high schools. It is reported one-third of grade pupils enter the high school as compared with one in twelve in 1890.

—San Diego, Calif. The new junior high school to be erected in the northeast part of the city will be called the Woodrow Wilson Memorial School. Architect Theodore Kistner, San Diego, will prepare the plans.

—The name Woodrow Wilson has been selected by the parent-teacher association and the pupils for the new No. 8 School, at Battle Creek, Mich.

—In view of the condition of the school fund, the school board of Chicago has eliminated salary increases from the 1924 budget. It will be the purpose of the board this year to keep within its means.

—The school board of Paducah, Ky., has adopted resolutions fixing a maximum fifteen cent school tax and a fifteen cent sinking fund tax.

—The board of estimate of Yonkers, N. Y., has made reductions totaling $33,000 in the 1924 budget of the school board. The reductions involve large expenditures for repairs, office supplies and plumbing changes.

—A peculiar situation has arisen in Eaton County, Mich. Many of the rural schoolhouses are erected on leased lands. These leases now are expiring and in many cases it is found that at their expiration the land reverts to the owner, some of these leases have run for fifty years. Other leases provide that the property shall revert to the owner in case it is not used for active school work for a certain length of time.

—Rawlins, Wyo. The board of education has contemplated the erection of a new high school to cost $300,000. A school bond election will be held within the next few months.

—San Juan, Tex. On March 15th the voters of the school district authorized a bond issue of $80,000 for the building of new ward schools and additions to the present Mexican schools.

—An appropriation of $200,000 in addition to the $250,000 previously voted has been made for the erection of a school at Roslyn, N. Y.

—At a special election at Nunda, N. Y., an appropriation of $110,000 was approved for the erection of a new school and for the remodeling of the present building.

—An addition to the present school in District No. 3, town of Tonawanda, Erie County, N. Y., has been approved. An appropriation of $175,000 will give the district a $280,000 plant.

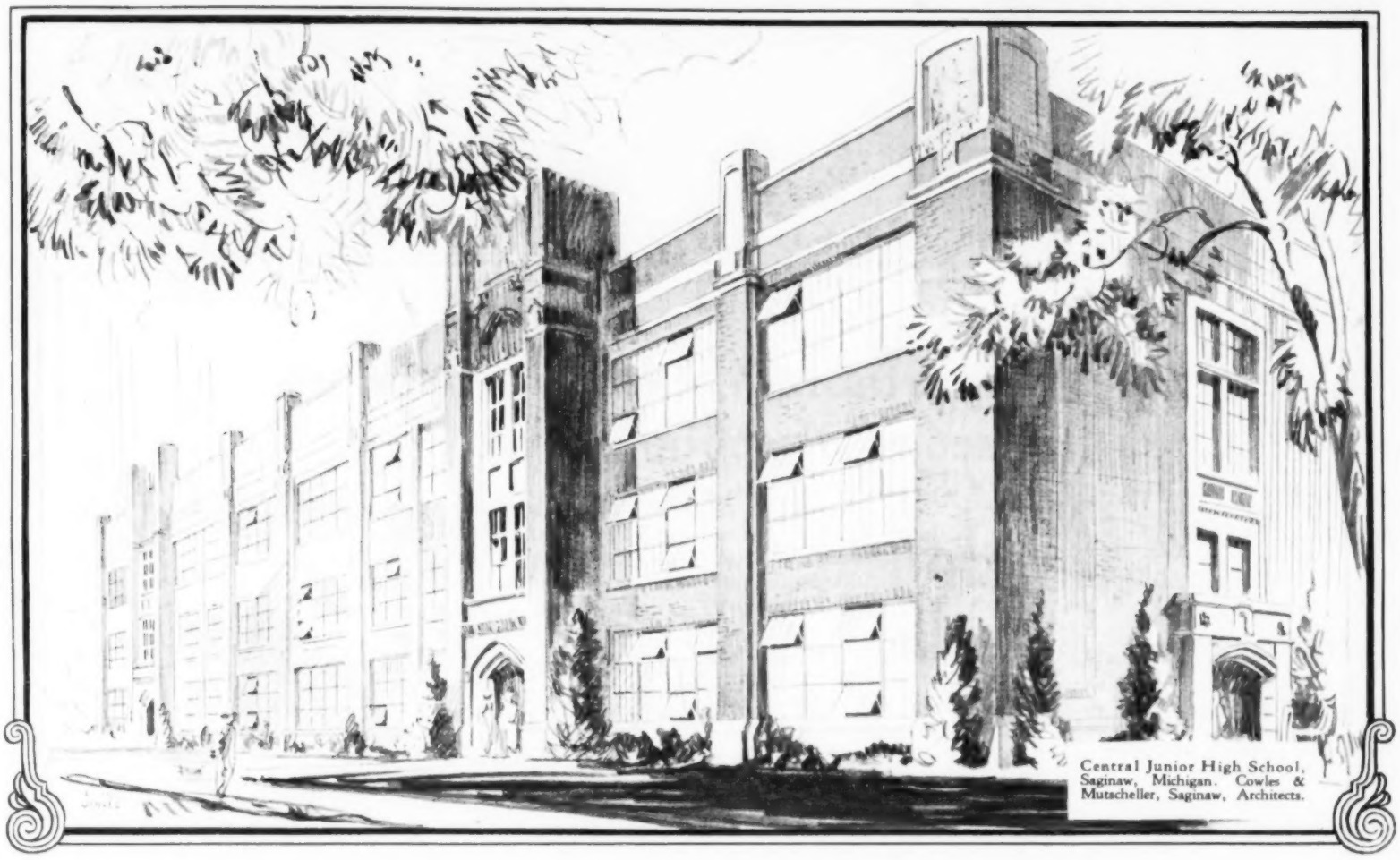
—B. L. Pierce, superintendent of Erie county, Ohio, contends that the one-room schoolhouse is more costly per pupil than the centralized school. He makes the following statement: "On the basis of salaries paid to teachers it is found that in village and centralized schools the salaries total $54,882.50 to 1,740 pupils, or a cost of $31.54 per pupil, while in the country school of the one or two-room type the salaries are $36,795 for 889 pupils or a cost of $41.38 per pupil, leaving a difference of about $10 per pupil.

—The fact that Chicago's school system is running behind something like two million dollars annually is assigned to a faulty system of taxation. The school tax is based on the growth of assessed property values. The school needs are based on growth in population. The two do not jibe. As a result the school board slumps deeper into the hole with each year's expenditures. At the end of 1924 they will face, it is estimated by the finance committee, a deficit of over $16,000,000.

—The school system of Alliance, Ohio, is in financial distress as are other Ohio cities. The experts who have been called in to study the situation do not find that the system is overloaded, but attribute the shortage entirely to the increased cost of education in keeping with the increased cost of everything else.

(Continued on Page 85)

ARCHITECTURAL FENESTRA



Central Junior High School, Saginaw, Michigan. Cowles & Mutscheller, Saginaw, Architects.

Architects who have specified Architectural Fenestra appreciate the practical assistance they receive from the Fenestra organizations fully as much as they do the good qualities they have invariably found in the product itself.

This is largely because every part of Fenestra service, while it saves time, avoids delays and eliminates difficulties both for the contractor and the architect, has a direct bearing upon correct installation of the product and therefore insures satisfactory operation for the building owner over a long period of years.

And this service is more than skin-deep—it gets down to the root of things.

(1) It offers layout assistance so that the product will be properly built into the architects plans to produce the desired results with economy.

(2) It provides correct estimates for each individual operation and assists the contractor in making his bid.

(3) It includes accurate detailing. The architect can be sure that Architectural Fenestra will always be in proper accord with other materials.

(4) It provides for prompt shipment and systematic follow-up. Delays are eliminated.

(5) It assures complete responsibility for erection. All Architectural Fenestra is erected by the Fenestra Construction Company, an organization of experienced sash men who relieve both the architect and the builder of all installation details.

This is the sort of five-fold obligation that the Fenestra organization is prepared to assume. Before you complete the plans for your next operation, let us explain this service more fully and give you detailed information regarding Fenestra Reversible Ventilator Windows, Fenestra Counterbalanced Windows and other Architectural Fenestra products.

Fenestra

DETROIT STEEL PRODUCTS COMPANY
Division of Architectural Construction
R-2266 East Grand Boulevard Detroit, Mich.

(Continued from Page 82)

—The Oklahoma City, Okla., board of education, headed by President Charles Evans, is engaged in paring the school budget "down to the bone." It is believed that the reduction will amount to $350,000.

—At a meeting of the Indiana Schoolmen's Club held at Indianapolis the subject of school accounting was discussed. The speakers were Superintendents A. E. Highly, Lafayette, and W. C. Borden, South Bend, and Dr. Leonard B. Job, of the state department.

—The school board at Elgin, Ill., has taken steps toward the adoption of an extensive building program.

—Indianapolis, Ind. Repairs and alterations to cost approximately $350,000 are the immediate outstanding need in the existing school buildings, according to a recent report of a special committee headed by Supt. E. U. Graff. In addition to outlining changes and alterations needed, the report shows that there are approximately 11,000 children either improperly housed in portable buildings, basements and halls, or on part time.

The report shows that there are nineteen buildings in need of improved lighting facilities; 34 in need of adequate toilet facilities; 23 in need of additional lavatories and sanitary equipment; 20 in need of heating systems; eleven in need of auditorium facilities; 21 in need of extensive repairs, and 35 in need of additional wiring.

The program is to cover a period of three years and is to be begun in the near future.

—The average annual cost per pupil for education in the public schools of Colorado for the year ending June 30, 1923, based upon the number of pupils enrolled, was $83.53, compared with $80.57 for the preceding school year. Based on the average daily attendance the annual cost for the same period was $119.59, compared with $114.88 the preceding year. The cost of education, it is pointed out, has increased rather rapidly in recent years. The average annual cost per pupil based upon enrollment in 1920 was $57.85, the increase since that time being 44 per cent. The total cost of education in the school is now in excess of $20,000,000 annually and the bond interest amounts to slightly more than $1.000,000 annually.

—The Supreme court of Ohio, in deciding two test cases, has ruled that no school district has power or authority to borrow money for the maintenance of schools after January 1, 1924. Approximately 200 school districts already short of money are affected by the decision and the majority of them will be forced to close their schools before the end of the present term.

—Lorain, O. Tests of the heating plants in the several school buildings have recently been made by the business manager, Mr. W. A. Pillans. The tests covered a period of five weeks and were made to determine the amount of coal used, and the method of firing, type of heating plant or other condition contributing to the excessive use of fuel. Steam heating plants were found to be most efficient. The amount of coal used was 11.7 tons per day, which produced a cost of $63.65 a day.

The report mentions size of windows, ventilation fans and other factors entering into the coal consumption.

—Warren, O. The board has taken steps to establish a system of accounting for the school system and has assigned Mr. J. G. Hickox to the work of creating and establishing a practical system.

—Corsicana, Tex. Mr. I. N. Cerf has given to the new high school as a memorial to his father, I. Cerf, a complete outfit of curtains and stage scenery, which cost several thousand dollars.

—A ten-mill tax levy was recently passed at Kelso, Wash., to pay current school expenses and to continue the operation of the schools for the remainder of the year.

—Bellingham, Wash. Acting upon the suggestion of the finance committee, the school board has recently approved a fifteen-year building program involving the construction of a grade school, the enlargement of five existing buildings, and the purchase of additional land and equipment. The board has decided to call an election in May to vote on a bond issue of $425,000. The program calls for the conversion

A. CROSBY KENNETT HIGH SCHOOL, CONWAY, NEW HAMPSHIRE.

This complete high school building has been erected by the widow and sons of A. Crosby Kennett and presented to the town of Conway. The building cost approximately $200,000.

of two grade schools into intermediate schools, the erection of new buildings and additions to take care of present needs, and the acquisition of sites to provide for the future expansion of the school system.

—Wilkesbarre, Pa. The 26 school buildings have been insured in 68 local agencies, each agency being given from $8,000 to $45,000, for an aggregate insurance of $2,754,900. The amount of the insurance represents an increase of $1,152,400, the former having been $1,602,000. The increases are attributed to the increasing costs of construction which have been prevalent during the last few years.

—The school board at Kent, O., has increased the amounts to be charged for the use of the Roosevelt high school auditorium. The following scale of prices has been adopted:

Minimum charge for evening use, $25; practice rehearsals, (evenings), $10; practice rehearsals 4:00 to 6:00, $5; extra for current and lantern, $2.50.

—The police of Chicago report that during the year $100,000 worth of school windows are broken by vandals.

—J. L. Coath of the Chicago board of education has protested against the employment of expert legal service by the board at $100 a day. The answer made by the board's attorney is that an impartial investigation of the affairs of the old board makes expert service necessary.

—The school fund of Quincy, Ill., earned $2,800 in interest for the last ten months.

"We hear much these days about educational costs and the danger of retrenchment. Everywhere spokesmen for the schools are calling upon the public in clarion tones to give more rather than less for the support of public education," says a recent bulletin of the Public Education Association of New York City. "We believe that the people will support the public schools to the utmost, in proportion to their confidence in their efficiency and integrity. The public has created and maintained the public schools, however, for the rearing of children into citizenship, and not to provide niches in a hall of fame or fortune for political and personal aspirants. It is willing to give honor and reward where honor and reward are due, but it will hesitate to pour out its cold cash by the millions, or to sacrifice the legitimate educational interests of its children, to further the manoeuvers of those who, for the achievement of personal ambition, would thoughtlessly or wilfully dislocate and weaken the morale of the great organization for public education which it has created."

—North Tonawanda, N. Y., voted $650,000 for new schools, including a $400,000 high school. Poughkeepsie, N. Y., voted an additional $75,000 to complete high school.

—Section 11 of the Denver, Colorado, board of education report just issued deals wholly with educational statistics and financial figures provided by the secretary. The latter is provided with a complete inventory of all school properties.

—During the school year 1921-22, New York state spent $188,604,972 for education, an increase of 125 per cent from the sum of $83,682,747 spent in 1917-18. This included capital outlay. Eliminating capital outlay, the increase in the 5 years was from $73,000,000 to $150,000,000, or 105 per cent. The average cost for each pupil in New York state in the 5 years follows: 1917-18, $55.22; 1918-19, $59.69; 1919-20; $67.44; 1920-21, $93.25; $1921-22, $96.69.

—The Marion, Ohio, board of education has reduced the junior high and grade school tuition from $72 to $63. The senior high school tuition is fixed at $117.

—It is estimated that before the end of the year the Chicago schools will face a deficit of over thirteen million dollars. An increase in the tax levy of $1 per $100 of assessed valuation will have to be made in order to overcome the deficit next year.

—Architect J. A. Headlund of Salt Lake City criticizes the building code on schools adopted bv the state educational department. He holds that it imposes impossible conditions, and says: "As an instance of the code's dangerousness, the author suggests that in order to make ventilation flues 'draw,' hidden 'kerosene stoves be placed in the said flues * * *" Shades of hades! What would Fire Chief Bywater say to this? One immediately calls up a vision of the terrible Collinwood school disaster of a few years ago, where about 170 school children were cremated."

—New York, N. Y. To overcome the present schoolroom shortage, the board has constructed fifty new buildings and additions. Plans and specifications for forty more buildings are in various stages of completion. A number of these buildings will be erected within the next two or three years.

—The public schools of Milford and Hillsboro, O., have been obliged to close earlier than usual because of a lack of funds to complete the school term. The action was taken after all hope for financial relief had been exhausted.

—Fargo, N. D. The school board has adopted a recommendation of the teachers' committee providing for a reduction of $43,350 in the annual school budget. The reduced budget calls for the elimination of kindergartens and swimming pools and for a reduction of teachers' salaries. Several special courses have been discontinued permitting a decrease in the number of teachers employed.

—The school board of Pittsburgh is considering a suggestion of Supt. William M. Davidson providing for eleven new schools to relieve overcrowding and to complete the building program. It is apparent that the board seeks to erect the buildings where they are urgently needed and to reduce the cost of construction whenever possible.

"Taxes are burdensome, but the taxes that are paid for overmuch government, for crime, for waste and luxuries are the taxes that hurt. The general operations of government, national, state and local, cost three times as much as the total educational bill," said Wm. T. Carrington, former state superintendent of Missouri recently. "It is, therefore, evident that the burdensome tax is not for education but for general government. When our crimes are costing six times as much as our schools, it is high time for positive action toward the reduction of crime."

—President A. L. Bell of the Ridgeway, Pa., board of education has announced that the estimated cost of the new high school to be constructed will be $250,000.

—Springfield, Ill. Because of a decrease in assessments, the school board will this year suffer a loss of revenue in the amount of $44,230. Of this amount about $12,000 is against the building fund and the remainder against the educational fund. To meet its financial needs, the board has asked the voters to authorize an increase in the educational fund from two to two

(Concluded on Page 88)

(Concluded from Page 86)

and one-half per cent, and an increase in the building fund from three-fourths of one per cent to one per cent.

—Wakefield, Mass. The municipal budget this year includes provisions for a bond issue of $247,350 for school building construction.

—New York, N. Y. Continuous and substantial relief of congestion in the public schools has been effected this year, according to recent reports of the school building department. It is estimated that with the opening of school in September, there will be a reduction of fully 75,000 in the number of part-time pupils. More than 30,000 new sittings have been provided for use next fall and it is expected that even more relief will be provided as other projected buildings are completed and put into use. Among the new high schools to be occupied next fall are the Julia Richman, the Thomas Jefferson and the New Utrecht. These three buildings will offer accommodations to 10,734 students on full time, or 15,000 on part-time sessions.

—Approximately $10,000,000 have been used in construction of elementary school buildings in Illinois since 1914, according to a pamphlet issued by State Supt. Francis G. Blair. The pamphlet contains illustrations of 130 elementary school buildings in the state, most of which have been constructed during the last few years.

—Irregular school attendance in the United States has caused a waste of $250,000,000, or one-quarter of the money spent for public education, according to the United States Bureau of Education. The total cost in all the states combined was about one billion dollars. By allowing children to miss school one-quarter of the time parents cause a waste of one-quarter of the money paid to operate the schools.

—The school board of Lincoln, Neb., in urging a tax of fifteen mills on the dollar for school purposes has adopted unique methods of comparison. School costs are compared with bank clearings, trolley receipts and other statistics of business. The total current expense of the schools for 1922-1923 amounted to $1,000,477, or approximately $80 for each elementary pupil, and $117 for each high school student.

Building permits for residences and apartments in 1923 amounted to $2,132,061—enough to provide modern school buildings for every school child not housed in a modern building. The amount spent for paving, water mains, sewers, and sidewalks for the city was $843,876. This was enough to provide modern buildings for the increased enrollment in the schools.

—Oklahoma City, Okla. The school board has made tentative reductions in the school budget for next year amounting to more than $350,000. In the direction of economy, $250,000 was eliminated from teachers' salaries, $12,000 from the health department, $30,000 from the building department, and $5,000 from the visiting teachers' department.

—Houston, Tex. The name of Woodrow Wilson has been proposed for the new Cherryhurst School in process of erection.

—Tacoma, Wash. The school board has selected names for the six new intermediate schools now under construction. The first will be called the Jason Lee, in honor of an early pioneer who founded the first school in Pierce County. The second will be known as the James Stewart, in honor of the first Tacoma teacher. The third will be called the Morton McCarver, the fourth the Robert Gray, and the fifth the Allen Mason. Still another will be called the Franklin Gault, in honor of the man who directed the school system from 1888 to 1892 and who was instrumental in establishing the first high school in the city.

—Bellingham, Wash. The school board has approved a recommendation of the finance committee providing for the adoption of a building program and an election to vote bonds to the amount of $425,000. The plans call for a program covering fifteen years and involve the conversion of three buildings into junior highs and the erection of several grade schools. Other items included are $15,000 for administrative offices, $50,000 for replacement of the Whatcom high school shops, $50,000 for auditorium and classrooms at the Fairhaven high school and $20,000 for gymnasiums at two other buildings.

—A recent report on the school building program at Atlanta, Ga., shows that the new buildings will have cost $4,964,679 by the time the boys' and girls' high schools and the colored high schools have been completed. The bonds for the project amounted to $3,867,000, making a difference of $1,097,679 which was subsequently made up by special appropriations and interest money.

—Philadelphia, Pa. The department of buildings of the school board has recently completed an investigation which is designed to find the most desirable type structure in which to house school children. The investigation covered many points of construction, costs and materials, and it was conceded that the most satisfactory as well as economical was reenforced concrete.

An article in Concrete Age on the subject shows that Philadelphia school buildings are erected without the use of bearing walls. The entire structure is one large frame formed of concrete, encased with brick curtain walls and trimmed with stone. This permits great acceleration in actual construction and a reduction to the minimum of the possibility of delay due to labor trouble and delivery of materials.

The use of reenforced concrete frames has made it possible to reduce the thickness of floor construction, which in itself has lowered the height of buildings as much as 36 inches, with a reduction in cubical contents of the structure and a corresponding lowering of cost. It has made it possible to carry stairs of concrete up with the buildings, providing a means of travel from one floor to another during construction.

—Alcoa, Tenn., has a new school building known as the Bassell School. The building is a one-story structure and was erected at a cost of $60,000.

—At Providence, R. I., there is a pressure to cut school costs. At the same time the general community sentiment is in the direction of high efficiency in school administration. Superintendent Isaac O. Winslow through a report has stimulated the confidence of the community in the direction of progress.

—At Holyoke, Mass., the question of compensating women school principals the same as men has been raised. In arguing for the equality principle the Holyoke Transcript says: "It is not that men should be discriminated against or that women should be discriminated against, but our school principals should be chosen for their teaching powers, not for their sex, and that they should be paid equally regardless of whether they are men or women."

Durable Fence

HERE'S protection for school property at less cost per year than ever before. The ***uniform,*** super-heavy zinc coat that covers Page Fabric is approximately ***4 times as thick*** as that on ordinary fence. It means longest life, a permanent economical fence.

Give your administration of schools the benefit of Page Protection. Unclimbable, flexible, Page protects pupils at play. keeps them within bounds, breeds orderliness and promptness — relieves teachers and school authorities of extra cares. There is a Page Distributor near you who will furnish plans and estimates promptly — write for his name and address, and for the Page Fence Book, showing typical school installations.

PAGE FENCE & WIRE PRODUCTS ASSOCIATION

215 N. Michigan Ave., Chicago, Ill.

STEEL AND WIRE PAGE QUALITY PRODUCTS

"America's first wire fence~1883"

PAGE

PROTECTION FENCE

STEEL AND WIRE PAGE QUALITY PRODUCTS

"America's first wire fence~1883"

THE STATE SCHOOL TAXATION PROBLEM

The adjustment of taxation to meet the needs of the schools is a live subject in a number of states. Governor Alfred E. Smith in a message to the legislature brings out the status of school taxation in New York state which in some respects finds application to other states. The governor says:

"A large part of the cost of local government is for education, and that cost we cannot and should not attempt to get away from. The governmental function of educating our children must be carried on at 100 per centum of efficiency even if it carries us to the point of depriving ourselves of some other necessity.

"The cost of the support and maintenance of our public school system during the school year ended July 31, 1923, was approximately $210,000,000. Of this amount $37,640,000 was appropriated by the state and apportioned by the Commissioner of Education in the several cities and school districts of the state. Of the amount appropriated by the state, approximately $22,000,000 was raised by levy of a state tax upon the taxable real and personal property of the state. It thus appears that of the amount expended for the support of the public schools during the last school year $194,000,000 was raised by a levy of a direct tax upon real and personal property.

"In considering the financing of the public school system it must be remembered that such system is a state system and the state as a whole is concerned directly therein. An examination of financial and tax statistics of the state will indicate that there is a great diversity and inequality in the tax rate levied for public school purposes. In the cities such rate varies from three mills to 28 mills; in union free school districts having a population of over 4,500 the rate varies from four mills to 25 mills; and in union free school districts having less than 4,500 the rate varies from four mills to sixty mills.

"Among the 10,000 common school districts in the state there are nearly 1,000 which either pay no tax for the support of public schools or the tax is so small in amount that it is negligible. Of the 8,800 rural school districts maintaining school in which one or more teachers are employed, the tax rate varies from 1 mill to 75 mills. Although the discrepancy would doubtless be less than herein indicated if the school tax was levied upon the actual value of the taxable property, it is apparent nevertheless that there is a great inequality in the burden of the tax upon the several cities and school districts for the support of public schools.

"In apportioning the public money to the school districts of the state the law does not recognize the financial resources of the several cities and districts and the obligations which are placed upon them by way of providing school facilities and paying the cost of public school maintenance.

"It is not good financial policy to borrow money for current expenses. If our public schools in these cities are to be maintained with their present standards and at the same time the city governments to be provided with what is essential for their support, there must be some method advised to furnish additional sources of income. Amounts to be raised by a state tax and apportioned to these cities and other districts in the state should be increased to the extent required to furnish them relief.

"It is evident from the information available that the present method of financing our public school system is inadequate and unscientific. Means should be provided for a careful study of this situation. It is closely connected with the tax conditions to which reference is herein made, and both questions may well be considered at the same time.

"I shall not attempt to advise you how this is to be accomplished. The taxes on real estate cannot be further increased, and if possible should be reduced. If the cost of local government is to continue to increase other sources of local revenue must be found. Various possible sources occur to my mind. The solution may be found in local income taxes, local business or occupation taxes, local privilege taxes, local luxury taxes; but in any event, if there is to be any stability in real estate values or in the rent charged for occupation, either the tax on real estate must be fixed or at least a maximum rate or the taxes on all objects of local taxation, including real estate, must be imposed upon a flexible basis, so that an increase of reduction in expenditure will be reflected, not in the taxes on real estate alone, but in all kinds of taxes imposed, so that the burden or benefit may be evenly distributed. Such a system would serve as a barometer of expenditure, and would operate as a check upon the extravagance of local officers.

"The report of your joint legislative committee also discloses the fact that many other taxes in the state, notably those imposed on public service corporations, are unequal and discriminating. The taxes on financial corporations, including the tax on moneyed capital, are unsatisfactory and confusing.

HYGIENE AND SANITATION

—Flint, Mich. Remarkable success has been attributed to the establishment of the dental department last fall. Under the plan, school dentists or nurses examine the mouths of the children once a month, and mark the condition on the card so that parents may know the exact standing regarding the teeth. Previous to the establishment of the dental department there were 3,000 perfect mouths. Now there are more than 7,000 with one hundred per cent mouths. The total average condition is about 81 per cent.

—Hart, Mich. The board has ordered the iodine treatment for children showing symptoms of goiter.

—Springfield, O. Dental and eye clinics will be discontinued at the end of the present semester because of a lack of funds. The change will mean a saving of about $1,000.

—The Wyoming Public Health Association held its annual meeting and state conference on March 10th and 11th, at Cheyenne, Wyo. At the meeting, Mr. C. M. Negus, of Greybull, discussed "The School's Crusade for Health" and Dr. Grace R. Hebard, of Laramie, spoke on the subject "Child Labor vs. Child Health."

—The school authorities at Alma, Michigan, have made a survey of the goiter evil. All of the children, 1532 in number, were examined. The percentage of children subject to goiter ran to about 30 per cent. In the way of a preventive iodostarine chocolate tablets were administered. A writer in the Michigan Public Health pamphlet contends that "goiter is the easiest known disease to prevent." It is simply a question of how much iodine to apply.

GANGS *or* GAMES

The game is stronger than the gang, if you make the game possible.

THIS IS PLAYGROUND TIME

WE CORDIALLY INVITE INVESTIGATION OF

Everwear Steel Playground Apparatus

BUILT UP TO A STANDARD OF SAFETY, DURABILITY, BEAUTY AND PLAYABILITY

"Everwear" will make the money invested mean everything that you have a right to expect in playground equipment.

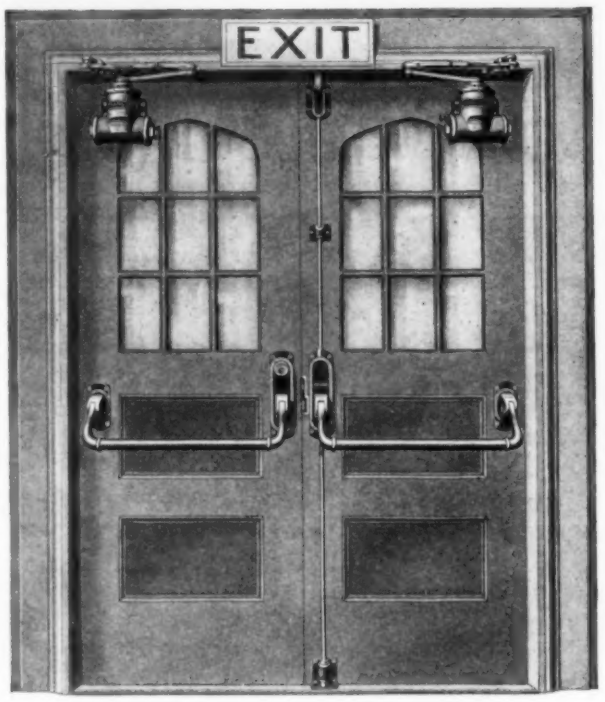
The beautiful new Everwear Catalog No. 16 is just off the press. Please write for your copy.

THE EVERWEAR MANUFACTURING COMPANY
Department A, Springfield, Ohio

"Galv-After" Chain Link Fence Fabric

for School and Playgrounds

Safety in Schools



School officials, who are responsible for the protection of the lives of the pupils and are anxious to make proper provision for quick exit in case of fire or panic, will find in

SARGENT

Fire Exit Door Bolts

an adequate equipment which meets all conditions. The Sargent Cylinder Locks with which they are fitted provide for complete security and prevent entrance from the outside of the building when school is not in session, while they can be arranged to permit entrance during school hours, if desired.

Quick Exit at All Times

is provided and in case of necessity the doors can be instantly opened by slight pressure on the handle bars at any point.

Door Checks

close the doors, during their day by day use, quickly and quietly, the application shown in the illustration with the Sargent special foot (No. 35) being particularly desirable.

Sargent Fire Exit Door Bolts, Locks and Hardware are sold by representative dealers in all cities.

SARGENT & COMPANY

Manufacturers

New Haven, Conn.

New York Chicago

SCHOOL GRADING AT GALION, OHIO

The school authorities of Galion, Ohio, under the leadership of Supt. E. V. Bowers, recently inaugurated a standard system of school grading. Its adoption was preceded by a questionnaire inquiry which brought out the fact that schools employing the per cent and the letter system of rating were about evenly divided.

Those favoring the letter system were generally agreed on employing the first four letters a, b, c, d, and for the failing division either e or f. The tendency, it has been found, is to interpret the letters into percentages, but the Galion school authorities intend to disregard the percentage idea entirely. The following schedule has been worked out:

Method of Grading: For purposes of grading, pupils are divided into five classes, A, B, C, D, and F.

A indicates that the pupil is in the highest group (93%-100%).

B signifies a scholarship good or above the average (87%-92%).

C Scholarship average (80%-86%).

D Scholarship poor, barely passing (75%-79%).

F Failure (below 75%).

Class A

1. Ability to apply principles intelligently and give original illustrations.
2. Considerable voluntary reading and investigation other than assigned in text.
3. Answers well directed in thought; no guessing.
4. Rarely fails to respond to pertinent questions on the assignment.
5. No help from the teacher in recitation to draw out correct answers.
6. Written work neat; statements brief but clear; accuracy in wording, form, thought, spelling and punctuation; reported on time.
7. Attitude in class: good position, attentive, enthusiastic.
8. Preparation: thoughtful and systematic preparation; (b) directions of the assignment followed; (c) ability to work alone; (d) good judgment in use of time.
9. Cooperation with teacher and organization.

Class B

1. Mastery of the subject matter assigned.
2. Ability to apply principles intelligently.
3. Some voluntary reading and investigation, other than that assigned in the text.
4. Generally responds to pertinent questions on the assignment.
5. Answers well directed in thought.
6. Pupil completes assigned topic in recitation.
7. Frequent volunteering expected in recitation.
8. Preparation: (a) thoughtful and systematic; (b) directions and assignment followed as an outline; (c) ability to work without much assistance; (d) judgment in using time to advantage.
9. Written work: neat; statements brief and clear; accuracy in wording, form, thought, spelling and punctuation; reported on time.
10. Attitude: proper and beneficial, close attention and good position; cooperation.

Class C

1. Mastery of a major portion of the subject matter assigned.
2. Ability to apply principles.
3. Average response to pertinent questions on the assignment.
4. Irregular answers, not well directed in thought.
5. Questions from teacher necessary to complete recitation.
6. Some volunteering in recitation.
7. Written work: (a) reported on time; (b) carelessness shown in form, wording, thought, writing, spelling and punctuation.
8. (a) Daily preparation; (b) insufficient time spent in preparation; (c) requires frequent assistance in preparation.
9. Attitude in recitation: (a) attention poor; (b) needs reminding about correct position.
10. Little imagination or creative ability shown.
11. Work quite strong in one or more items but weak in others.

Class D

1. Mastery of sufficient subject matter to do related advanced work or continue in the subject.
2. Ability to apply a part of the principles.
3. Response to questions not clear or complete.
4. (a) Very irregular answers; (b) topical recitations seldom made; (c) detailed questions from teacher necessary.
5. Written work: (a) containing about one-half of important facts; (b) little effort made to secure proper form, wording, thought, writing, spelling, punctuation and neatness.
6. Not constant in preparation.
7. Inattentive in recitation.
8. Requires much assistance in preparation.

Class F

1. F indicates that, in the judgment of the teacher, the child is not able to continue in the subject.
2. Little effort to respond.
3. About one-half of assigned work attempted.
4. Guessing at answers.
5. Written work careless and shows little ability; not reported on time.
6. No effort to make up work lost during absence.

SCHOOL PROGRESS ON GUAM

—The public schools of the Island of Guam were reorganized and placed on a modern basis by Dr. Thomas Collins, superintendent of public instruction. The work which was begun in October, 1922, was completed in May, 1923. There is now a one hundred per cent enrollment of pupils of school age (7 to 13 years), and all schools operate on a full day's basis, with a ten months' school term. The present organization includes primary, elementary, high and normal schools.

All teachers are required to attend the summer normal school during the months of June and July and two-thirds of the teaching staff are enrolled in private evening normal classes. This special training is necessary in order to obtain qualified native teachers, as the climate is not entirely agreeable to American teachers.

Dr. Collins has been retained as superintendent of public instruction in order that he may carry out the plans and purposes embodied in the new plan of school organization and expansion outlined for the island schools.

School Graduation Exercises

Organizing Forces and Building Commencement Programs

In American school life the staging of graduation exercises has become a joyous and festive occasion. It constitutes a celebration of a schoolroom task well performed, a renewal of allegiance to our institutions of government, and a God-speed to those who leave the school to enter upon the race of life.

While the graduates give a demonstration of what has been taught them and to express their appreciation and gratitude, the exercises also afford an occasion for a serious discussion of the part which our system of popular education plays in the training for citizenship and the common duties of life.

In brief, commencement exercises as examplified in the American school, constitute a rally of young and old to the principles upon which the great Republic is founded, and an expression of the higher and nobler aims and aspirations of our civic and social being. They, therefore, deserve careful attention at the hands of school authorities.

With this thought in mind Professor H. D. Meyer of the University of North Carolina prepared a bulletin dealing with the various phases of the modern commencement program. He begins his task by pointing to the importance of proper organization and says:

Organization and Committees

"In almost every instance the superintendent or principal of a school is executive head of the commencement organization. Therefore, as chief executive, the community looks to him for initiative in organizing and directing the commencement season.

"Frequently the superintendent or principal delegates the full authority for the commencement programs and affairs to some of the teachers. In any case there should be one person at the head clothed with authority to organize, plan, and direct the general trend of affairs."

He then recommends the appointment of several committees, as follows:

"Program Committee: This is one of the most important of the committees. Its duty is to arrange the general program. After the general plan is adopted it assigns the different parts of the program to other committees. It is suggested that the personnel be made up of the chairmen of the various committees.

"This committee should meet a month or more before the closing of school and perfect plans as rapidly as possible. It is not wise to try to have a commencement program hastily planned and executed.

"Decoration Committee: At this time of the year the building or room should be decorated for every occasion. The work of this committee is important, as the general responsive feeling on the part of the audience may be moulded by the method of decoration.

"Try to make the decorating an inexpensive thing. Utilize material in the community that is in taste and pleasing.

"Plan the type of decoration to be used.

"Music Committee: Have the program full of music. Music will add more to it than any one thing.

"Choose this committee from those interested and gifted along this line. Insist that they put in the program the very best type of music available. Stop at nothing short of the best.

Reception and Ushers Committee: While it is best to have a teacher in charge of this committee, the committee itself may be composed of members of the incoming senior class. Let them choose a leader as head usher. It is his duty to be everywhere to see if assistance can be rendered in any way. There should be enough ushers to place at the entrance and to assist in seating the people. They also handle the flowers and gifts for the pupils. Insist that they be on time—at least half an hour before the program begins. Let them wear their class colors.

"Before the day of the program some one should drill the ushers in courteous ways of ushering. This will mean a great deal to the audience.

"Publicity Committee: There will be some advertising to do for the programs and the commencement affairs. It is not to be assumed that every one in the community knows what is going on as to place, time, and occasion. Give full publicity to these particulars.

"Form this committee from such people and pupils as have shown aptitude for publicity work.

"Refreshments Committee: Sometimes there is a reception or a picnic with dinner on the grounds. If this is incorporated in the general plan of commencement, a committee should be formed to carry it out. An entertainment of this type calls for efficient organization."

General Helps and Hints

The author then submits a number of suggestions which may or may not be applicable to the locality or the circumstances. He says among other things:

"Many schools have some kind of festival program in the way of a play, a program of music and recitation, a field day, a picnic with dinner on the grounds, a pageant, or class-day exercises. Do not have all of these things. Choose one or two. Do not have more than two. It is probably best to allow the graduating class to make its own selection along this line."

He lays stress upon early action. Delay in thoughtful and timely preparation may lead to embarrassments. The several committees should be clear as to their contribution to the final program, and then he says:

"Another big factor to consider for all programs is the *time* element. By all means limit the time for every program. Try to keep within an hour and never allow it to last more than two hours. Study it and limit each number. This is *very* important."

The question of expense, and other features are also dealt with and the following suggestions are made:

"The best plan is to have an appropriation made from the school fund by the school board. This amount should be limited. Another way is by private contributions—making a canvass of the citizens interested in the school and obtaining a contribution from them. Try to ascertain what it will cost and then distribute the amount among the members of the community. Some classes start a class fund for this purpose. They make assessments or give entertainments during the year and charge a certain admission price. However, it hardly seems fair that they should have to pay for their own commencement. Another way is to charge an admission fee for the special program, the play, the festival, the pageant, or the like.

"Attend to printing the program well ahead of time. So often this is left to the last minute. Try to perfect the program as soon as possible and then make few changes. Be careful to have all those taking part mentioned on the program. Watch closely the spelling of names and see that none are omitted. People are very sensitive about this and the utmost care and attention are needed. If possible, put the names of teachers, school officials, and board members on the graduating program.

"Give a general and thorough cleaning-up to all schoolrooms and grounds. Nothing counts for more than having the grounds and building in fine shape. Organize for keeping the place clean during the celebrations. Make the school building the cleanest place in town.

"If there are exhibits in the building it will be well to have some one in charge of each room when people are there. Place some responsible person in general charge of the building with police authority. One never knows what may happen.

"It would be a good idea to have all the ushers dress as nearly alike as possible. Things of this kind add to the general atmosphere of the occasion.

"Be sure to mark clearly, by means of signs or lights, the entrances and exits of the building. Should occasion arise for the hurried exit of the entire audience these places should be conspicuous. Often disaster has come to a community through neglect of this point.

"Start on Time. If nothing else goes right in the whole program, have this part perfect. When the program is scheduled to begin at eight it certainly does not mean eight thirty or nine o'clock. If your community is not trained to be on time, this is a good opportunity to start. It may be a little noisy and inconvenient for awhile but once they know things are to start on time they will be on time. Make this a habit. It is one of the best trainers for children as well as adults.

"Let the programs grow out of the daily work of the classroom. Instead of the old-time recitation with 'the baby being snatched from the railroad track just as the train passed by,' assign some favorite poem or selection from the reader the child has been studying or a paper describing some industry in the community. Or perhaps there is some community folk tale that is interesting. In this way utilize the things the child has learned; put his education into practice; make it useful.

"When the members of the graduating class are to read papers, encourage their writing them themselves in their own way. Most of the papers are written by teachers or some one else and the child merely mimics along. The papers should be in simple language and form suited to the child. Choose topics that are interesting to the community and pertaining to it.

"In every audience there is the crying baby. This is a problem for each event. The parent can not come unless the child comes. The parents should be encouraged to attend and, if possible, provision should be made for the little ones. One of the teachers may volunteer to keep all the small children in one of the rooms and have a play session or allow them to sleep. When the crying begins an usher should suggest in a courteous way that the parent take the children into some other room until the crying ceases. Noise is disturbing to the program and it is best to have things as quiet as possible.

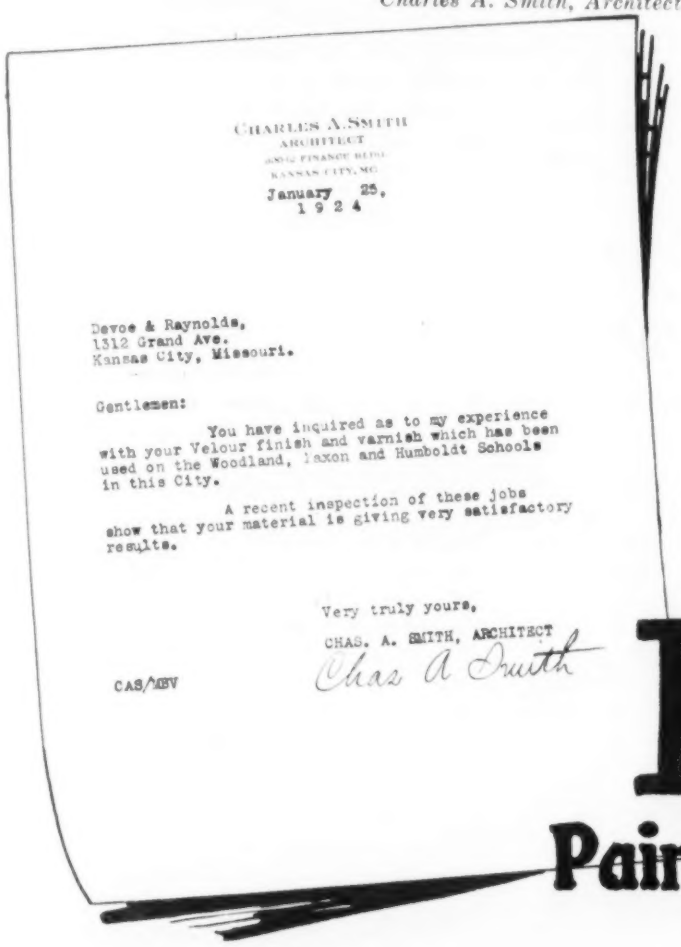
"There is always the problem of training the children for the program containing recitations, songs, games, dances, and the like. It is not fair to put all this responsibility upon one or two teachers. Try to distribute this burden. Of course, if there are music and expression teachers in the faculty, most of the training will be left to them. Each teacher should assume some responsibility of this kind, how-

(Concluded on Page 96)

Faxon School,
Kansas City, Mo.,
Charles A. Smith, Architect

Humboldt School,
Kansas City, Mo.,
Charles A. Smith, Architect

Woodland School,
Kansas City, Mo.,
Charles A. Smith, Architect



CHARLES A. SMITH
ARCHITECT
KANSAS CITY, MO.

January 25, 1924

Devoe & Raynolds,
1312 Grand Ave.
Kansas City, Missouri.

Gentlemen:

You have inquired as to my experience with your Velour finish and varnish which has been used on the Woodland, Faxon and Humboldt Schools in this City.

A recent inspection of these jobs show that your material is giving very satisfactory results.

Very truly yours,
CHAS. A. SMITH, ARCHITECT
Chas A Smith

CAS/MEV

(Concluded from Page 94)

ever, and often there are talented people in the community who are eager to help.

"Prizes for scholarship and record progress are always offered. The fewer the prizes given the better. Report cards with gold stars are preferable to cash or material prizes. One wins a prize and many lose. Too often those who lose feel that they should have won. This causes trouble. It is better to give other incentives to work and develop. If prizes are given, always praise those who did not win as much as those who did. The prize itself praises the winner.

"When there is an out-of-town speaker, do not place him at the end of the program. Remember that it costs something to get him there and he does not like to speak after every one is tired. Where there is a speaker it is best not to have too much added to the rest of the program.

"It would be a good plan to have reserved seats for relatives of graduates. If not, the best seats are often taken by people not directly interested in the members of the class.

"It is suggested that no flowers be delivered to those on the stage. It is all right to have the members of the class carry flowers, but the wholesale giving of them is embarrassing, as some pupils receive many more than others do.

"It is advisable also to make some regulation regarding clothes. Do not allow the graduates to spend large sums for commencement dresses and suits. Suggest a simple style and inexpensive material, such as organdies or voiles. Stress the wearing of white. The boys should wear dark suits and their shirts and ties should be of the same color. This will give unity of appearance.

"While the program is going on do not allow people to come and go. As soon as a number starts the ushers should close the doors. After it is over those who have come during that time should be seated and any one may leave. This will mean much to a smoothly running and enjoyable program.

Music, Decorations and Orations

"There are many different types of music to be used in commencement programs. Patriotic or familiar songs may be used as all the people may take part in singing these. The march for the students who take part in the exercises may be played by the school orchestra, if there is one. Then interspersed through the program are the choruses, quartets, solos, and instrumental selections. The respective talents of all the students should be closely inspected and each one should be in some number on the program if possible.

"Too ambitious a musical program should not be undertaken. Better a simple song well done than an elaborate one poorly done.

"Pines and evergreens may be used as the foundation for the decoration. The platform may be banked with them and the green relieved by bouquets of daisies, rambler roses, or any other flower abundant at the time. These flowers may be put in jugs, pails, or buckets, the bases of which may be covered with greens. A large bunch of flowers at each end of the platform is very pretty and effective. Another way, and one that is rather uncommon, is to cut the word 'Welcome' or the class numerals out of cardboard, cover with flowers, and suspend over the platform.

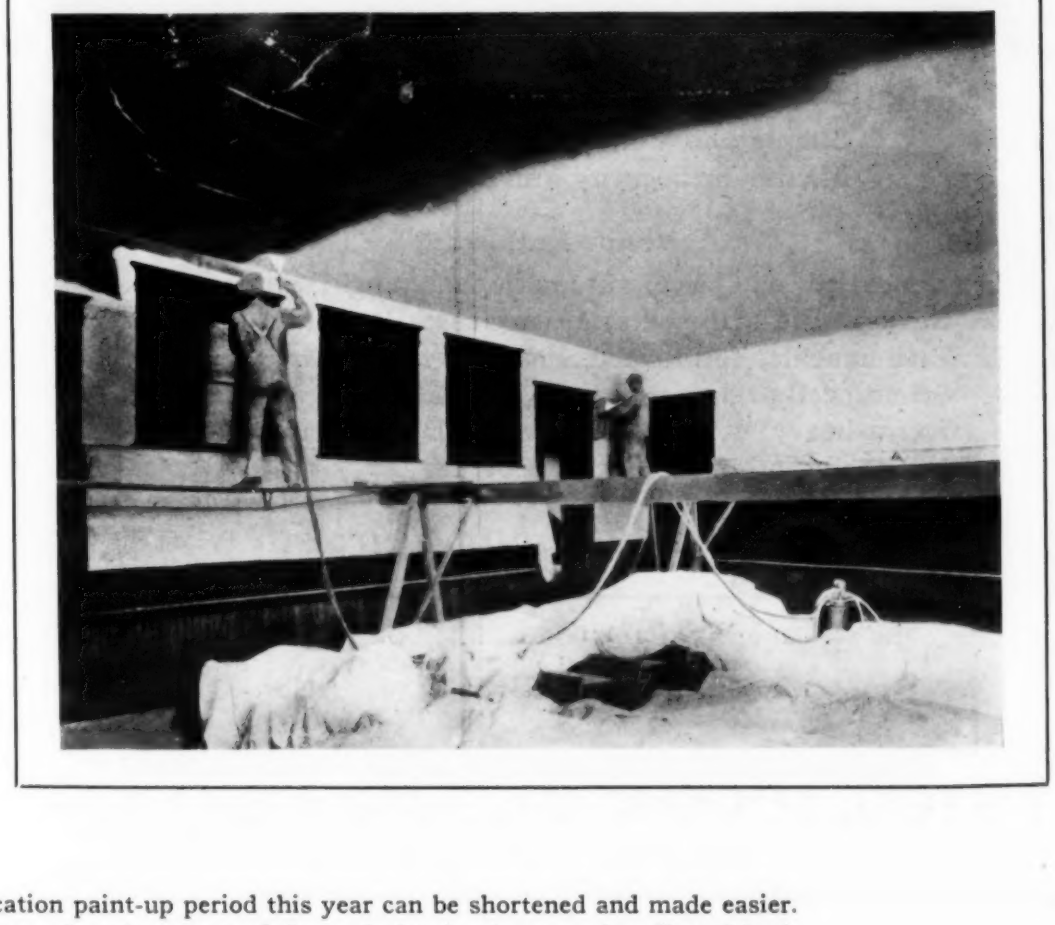
"The speeches, orations, and essays are usually the most uninteresting part of the program. This is because they are generally memorized selections which do not have any particular interest for the average audience. The 'ready-made' commencement speeches are flowery and oratorical but lack the local touch that people enjoy. It is possible to eliminate this tiresome feature by having the speakers choose some subject of local or national interest. They have usually won their places on the program as an honor and thus the audience looks to them for something really worth while. It wants to see some original work, something to justify the place of honor. It is fitting, therefore, that the prospective commencement speaker select a subject in which his community is interested, or some problem in which it should be interested, and then write his own speech.

Games, Drills, and Folk Dances

"An innovation in the regular program is the playing of games, certain formal drills, or folk dances. It would not be amiss to include some of these events in any program. Scattering them here and there will add color to many situations. To put a simple play game by the pupils of the primary grades into the heart of the program will add interest. A drill, a folk dance or two will also help.

"It is best, however, to have a single program, taking one afternoon or evening for games, drills, and folk dances. This event will be of community interest and will involve the participation of many pupils. This is one of its best features. Whenever it is possible to engage a large number of students in the events community interest is assured. An attractive program is possible with games, drills, and folk dances. Let each grade participate in some way. Specialize the primary grades in games, the elementary grades in folk dances, and the high school in formal drills and folk dances. The program should consist of two or three events from every class. Place the responsibility for the number of events on the grade teacher and insist that each be perfected as nearly as possible.

How You Can Save Money on Better Summer Painting



YOUR vacation paint-up period this year can be shortened and made easier. And no matter what the extent of that painting is, there can be effected both an improvement in the quality of work done and an appreciable reduction in the cost of that work.

Spray-painting makes all of this possible.

The complete DeVilbiss Spray-painting System enables the painter to apply on any character of surface a more thorough, greater hiding, smoother and more even coating than can be hand brushed. Such a coating looks better, reflects more light and wears longer. This modern system of painting also eliminates drips and spatters and makes painting cleaner and easier.

Painting the DeVilbiss way the work is done four to five times faster than brush painting. That means up to an 80% saving in labor costs. There is further advantage here through the use of less scaffolding.

The DeVilbiss Spray-painting System is bringing these advantages and economies to others in the school field. It can bring them to you with its complete equipment for any kind and amount of painting—inside and out.

For further consideration of this important matter of painting better and at less cost, we shall gladly mail you additional operation and equipment details of the DeVilbiss System. Address—

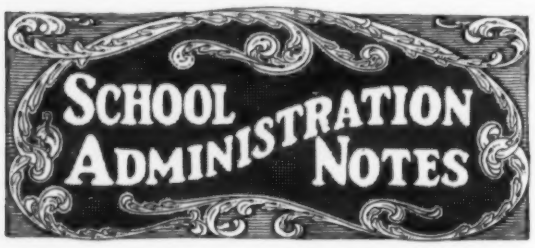
THE DeVILBISS MFG. CO. 268 Phillips Ave. TOLEDO, OHIO

***New* DeVilbiss Spray Gun**

This latest DeVilbiss development provides for the most advantageous application of any paint or varnish material. It embraces 17 important, distinctive features, among which are a "Self-centering nozzle," a "Quick detachable spray head," "All parts interchangeable," "Simplicity of design," and "One model for all purposes."

This new Type "A" Spray Gun insures the utmost in spray gun value and service.

DeVilbiss
Spray-painting System



A SUPERVISOR'S BLANK

Mr. Alfredo Silva, Supervisor of Schools for the districts of San Sebastia and Cayey, Porto Rico, has devised a complete supervisory outline for criticizing the work of his teachers and organizing his suggestions to them. The blank has been in use by Mr. Silva during a period of two years, during which time it has undergone some changes and improvements suggested by experience.

The outline suggests six general phases of the teacher's work which are to be observed and weighs several elements under each.

I. **Register.** Eleven items including completeness, correct balances, correct entries of absence, weekly summaries, neatness, etc. Total weight, 15.

II. **Plan Book.** Nine items touching upon the completeness and correctness of the plans, definiteness of lessons, thought provoking and developmental factors of plans and questions, etc. Total weight, 20.

III. **Material Conditions.** Twenty-four items involving the cleanliness, neatness and sanitary conditions of the school and its surroundings, the completeness of the furniture, teaching materials, records, test materials, etc. Total weight, 26 points.

IV. **Routine Management.** Twenty-five items, such as opening exercises, attention to program, course of study, daily program, devices for improving attendance and interest, establishment of parent-teachers' association, etc. Total of 73 points.

V. **Methods.** Twenty-six points involving presentation of lessons, responsiveness of class, questioning, discipline, lesson assignment, teachers' personal habits and attitudes as reflected in voice, manner, self-control, enthusiasm, etc. Total, 108 weights.

VI. **Results.** Five points involving actual classroom products as shown by tests, completion of work, etc. One hundred weights.

The total sum of the values is 400 and while much of the material is of local use, the whole is of interest as an objective and quite inclusive method of judging the teacher's work and assigning definite values to important points.

In practice, Mr. Silva has found that the following advantages are obtained:

1. Teachers like this plan of supervision.
2. The sheet sets an ideal of perfection for the teacher. It is better to have a concrete ideal at all times, than to have none.
3. In every visit to any schoolroom the supervisor "takes a picture" of the most important factors which determine the efficiency and success of the schools, and leaves a solution for every undesirable condition.
4. In every visit to any schoolroom the supervisor gives as much help as possible to the teacher in relatively short time: one and a half to two hours.
5. In every visit to a schoolroom the supervisor is HELPING a teacher professionally, and rating him.
6. At any time during the year the teacher knows her standing with the supervisor.
7. It makes the classification of teachers a just procedure because the supervisor has numbers to back his judgments.
8. It creates an excelled enthusiasm and emulation among teachers. Every teacher struggles as hard as possible to obtain "as many points as possible" in each visit of the supervisor.
9. The suggestions of the sheet are clear, short, simple, enumerated and easy to understand even by teachers of poor professional preparation.
10. It unifies the school work of any school district.

ADMINISTRATION NOTES

—Monticello, Ind. As a means of curbing the cigaret smoking habit among school boys letters have recently been adressed to patrons of the school over the signature of teachers in the Monticello and Union township schools. The teachers call attention to the bad results following the smoking of cigarets and call upon the patrons and the public to curtail the use of tobacco by the minors of the community. To this end the teachers urge the enforcement of the state law against cigarets and the passage of an ordinance forbidding advertisements on bill boards or buildings within the limits of the town.

—High school graduation, four-year college course, an Iowa certificate and two years of successful teaching experience are the prerequisites for superintendents of schools in Iowa as provided in a recent bulletin issued by the state superintendent's office. The bulletin also lays down definite rules governing the appointment of high school teachers. They are as follows:

1. High school graduation plus the completion of two years of training in an approved college. At least one-half of the high school teachers must have completed four years of training in an approved college.
2. An Iowa state certificate or special uniform county certificate for the subjects taught.
3. A teacher of home economics must have had thirty semesters or forty-five term hours of training in that subject in an approved college. A teacher of manual training or of agriculture must have had six semesters or nine term hours training in an approved college.

—At Philadelphia, Pa., the school authorities have prescribed a uniform dress for girl students. While the wearing of the dress is purely voluntary, a number of the students at the South High School have adopted the uniform as a manifestation of school spirit. The costume consists of a dark blue jumper, embroidered with the school monogram, a white tailored waist, sport shoes and stockings. The cost of the entire costume is estimated at ten dollars.

—Despite vigorous protests, the school board at Springfield, Ill., has refused to permit dances in the schools. The refusal is attributed to the abuses which crept in when this form of recreation was formerly permitted.

—A recent decision of the Ohio Supreme Court that a county board of education may not borrow funds to assist schools facing financial crises, will result in the early closing of the Clayton

(Concluded on Page 101)

HOCKADAY PAINTS

Are Stain-Proof and Washable

WE want to assure architects that when we make a statement as above, meaning just exactly what it says — we have every proof in our hands necessary to back it up to the limit. We have everything to lose and nothing to gain by misrepresentation and for this very vital reason we are careful to give out information about Hockaday that every architect can rely on because the proofs are at his call whenever he wants them. When we say Hockaday paint in service has withstood washing and scrubbing for as long as 12 years, we can furnish the evidence.

Further, the close co-operation and really very unique service we offer to architects is designed to be a sincere help to eliminate any worries and troubles which may be connected with a painting job. We will appreciate requests from architects for complete information covering the various interesting phases of this service.

What could be more appropriate for schools than Hockaday?

Write for our big illustrated "Paint Mileage" Book. Free to you if request is received on your letterhead.

Hockaday is a different paint. It comes in two parts — Body and Reducer.

THE HOCKADAY COMPANY
1823-1829 Carroll Avenue
CHICAGO

HOCKADAY

THE WASHABLE PAINT FOR ALL INTERIORS

(Concluded from Page 98)

Consolidated School and other county schools, according to the assistant county prosecutor.

—State Supt. Charles A. Lee of Missouri has issued a new rule which is intended to remove much of the irregularity caused by pupils trying to do first-year high school work in one-room country schools and requesting credit for the work in classified high schools. The rule reads:

"Pupils from unaccredited schools may be admitted to conditional standing in classified high schools by passing an examination given by the county superintendent on a list of questions prepared by the Department of Education. The papers must be graded by the superintendent or principal of the high school and kept on file for the high school inspector."

Under the rules, rural schools giving high school work for approval must have two rooms and a teacher giving full time to high school work.

—Directors of independent school districts or townships in Iowa will be permitted to enter contracts for the services of a superintendent after the latter has served seven months of the required first year contract, under an amendment to the bill covering duties of school directors. The present law provides that superintendents' contracts may not be made until the superintendent has served one year. It is deemed desirable that the directors provide for the customary two or three-year contract previous to the expiration of the one-year contract.

—Springfield, Ill. The school board is contemplating the adoption of a plan whereby all books and supplies will be purchased by the schools and sold to the pupils at actual cost. It is pointed out that large savings will be possible to parents under the plan.

—Chicago, Ill. Children entering the elementary and high schools next fall are to be subjected to psychological tests in an effort to determine their mental ability. The purpose is to separate backward children from bright ones and to classify all students before they enter classes in September. Under the new plan the staff of psychologists will be increased from eight to fifty or more.

—Chicago, Ill. A drive against Communist propagandists who attempt to circularize public schools has been begun by school principals and engineers throughout the city. Most of the literature is given out to children as they leave the school buildings. This is in direct violation of a rule of the board. In addition, the aid of the mayor and chief of police has been requested to keep sedition peddlers from certain neighborhoods.

—Evansville, Ind. Following intelligence tests conducted last spring, it has been revealed that a large number of pupils are subnormal. The board will open additional special rooms for subnormal children. At present there are eleven such rooms which are found to be very successful.

—Supt. David B. Corson of Newark, N. J., reporting recently on a survey of all-year instruction, has declared that schools must close for the summer vacation if pupils are to get and to assimilate their education. Several of the schools in Newark tried the twelve months' system but the experiment has proven a failure, according to Dr. Corson.

Under the plan, all-year pupils were expected to complete the school work in six years. Instead, it was found that they graduated at an average age of 14 and seven-tenths years. The small difference was more than offset in the superior physical and mental state of the other group.

Particularly noticeable was the defect in the all-year school when the students were ready for high school work. A large proportion of them because of having been forced, were left behind and became retarded in other ways during the primary grade work. On reaching high school their deficiencies were more obvious and there resulted a large mortality and frequent withdrawals from classes.

The argument made that the all-year school is a great economy has been denied by Dr. Corson. Had it been possible to graduate the pupils in six years, the saving would have been effected but the failure to reach the goal made the cost of the plan as great, if not greater, than the vacation school system.

—A bill has been introduced in the Rhode Island legislature calling for a survey of the problem of mentally and physically defective children. The bill is supported by a group of social and welfare workers who believe that such children are in need of special education.

—A bill introduced in the South Carolina legislature provides for the establishment of kindergartens and for the admittance of children under 6 and not less than 4 years of age.

—At a recent joint conference on illiteracy held January 11th to 14th, at Washington, D. C., a resolution was passed asking that the Commissioner of Education appoint a national committee on illiteracy work. This committee is to be representative of all sections of the country and is to be given the work of reviewing the material on courses of study and methods of instruction and of presenting the results of its study to those engaged in the work.

The committee as appointed consists of nine persons and is headed by Mr. Charles M. Herlihy, state supervisor of alien education, Boston, Mass.

—High school graduation exercises are popular at Pasadena, California. The business houses close and 25,000 people witness the pageant and the distribution of diplomas at the stadium known as the "rose bowl."

—Romblon, P. I. In several community centers in the division of Romblon, parents and teachers of public schools have organized parent-teachers' associations whose aims are to provide adequate housing facilities and the necessary tools and equipment, and to aid teachers in obtaining and maintaining good school attendance, and in furnishing pupils with supplies, materials and class objects.

A plan looking toward more efficient instruction of pupils under one teacher has been tried out in several schools. Previously, the plan was to divide the pupils under one teacher—the strong and the weak—employing thereby only a one-teacher, two-division program.

Each central and each rural school has been given an appropriate supply of library books. Hereafter, all school plants will be provided with adequate library rooms.

—The teaching staff of the New York City schools, including principals, superintendents and attendance officers, consists of 27,325 persons. Of this number 23,659 are women and 3,666 are men.

"School janitors are of two kinds—lords and servitors—and they ought to be neither," says the Peabody Journal of Education. Well, what would you have? If the principal is boss, what about the janitor?

The Teachers' Agency from the Standpoint of the Superintendent

Ira B. Fee, Superintendent, Missoula, Mont.

Securing a position is a matter of vital concern each year to thousands of teachers. Each teacher not employed finds it difficult to learn readily of the vacancies in positions which she is fitted by training and temperament to fill. The methods not uncommonly employed in securing a position are unbusinesslike and unsystematic. The results of these methods are frequently unsatisfactory to teacher and employer, largely because the teacher has not had sufficient information to guide her in finding a situation for which she is properly prepared, and because, also, employing boards are painfully vague about the exact type of work to be performed. Perfectly good round pegs are, therefore, too often roughened by being inserted in square holes, and the rugged square pegs have their corners badly scarred by being forced into round holes.

To relieve the difficulties of this situation a science of teacher-placement is being evolved. That this business is developing to the point where it may be designated as a science may be questioned by many, but a study of this topic I trust will lead us to agreement on the propriety of the current use of the term in this field.

Public agencies have from time to time hazarded attempts at teacher placement. Much of that effort has proved sporadic and but moderately successful. Perhaps it is too early to say whether or not that field of service has proved on the whole unsuccessful. Its work may be but only begun. It is a field of endeavor so new that much may yet be done in that direction. The fact remains that the most fruitful field of active progress is in the private teachers' agency. The teachers' agency has proved, first by trial and error, and later by cool application of scholarly research, the best means of assisting teachers to find the positions for which they are best prepared, and second, and not less effectively have they served the employers of teachers by choosing for them teachers whose preparation and qualities enable them to give good service in the positions filled.

The Service of an Agency

It is of course obvious that teachers' agencies are business concerns. They are in business to make money, and this means the placement of teachers and the payment by them of commissions for the service rendered. This conception of the teachers' agency in no wise detracts from the fair recognition of their service to teachers. The first beneficiary of the business organization of the agency is the teacher herself. She is in need of a position. The teachers' agency is a member of clipping bureaus over its territory, and is able to keep in touch, through the usual news channels, of vacancies which develop. In that way the agency manager knows where vacancies are occurring for which the teacher is suited; he knows the salaries offered; he is able to bring this teacher in touch with bigger opportunities, with more vital situations, and to give the discouraged teacher new hope through revitalized opportunity. It is a matter of no small concern to a teacher struggling along on a meager salary to have knowledge of vacancies that will raise her wages possibly forty per cent and at the same time give her the better social advantages, the brighter outlook coming from the promotion to the larger community through the interest awakened in her behalf in a capable and conscientious agency manager. By reason of her hope to profit by her acquaintance with him the services of such a teacher are often steadily improved in quality so that the reports to the agency manager may be of the best. In this way the service of the teacher is stimulated and raised to a higher level by the indirect interest thus aroused.

But to the superintendent the selection of good teachers is of prime importance. A fine school plant will not insure a good school system, any more than a good factory equipment insures a good factory output. The wonderful organization of Henry Ford's motor plant is not shown in its buildings, though these are most important. Its greatness is in its human factor —the humanizing of the industry, the spirit and industry of the employees as they respond to the inspiration of Ford's leadership. True, the services rendered by Ford's employees are paid for, but many industrial plants have closed their doors because employees have not been capable, industrious, and interested primarily in the services they were called upon to give.

Of Importance to the Superintendent

The selection of teachers of the right type is of greatest importance to the superintendent. Potentially at least the agency is of great service to the superintendents. A mutual understanding of each other's problems is essential to insure that degree of success in the solution of those problems necessary to the best results. The agency manager must recognize that the superintendent is hampered by restrictions in free choice of candidates that requires mutual forbearance—the limitation of salary, the nature of the contract to be signed, the living conditions available to prospective candidates, the whimsical prejudices of school board members against certain small matters connected with teacher employment—all these and more. The superintendent must recognize the effect these limitations must have on the list from which the agency may make choice in making its recommendations of candidates. With these mutual concessions the agency can be of great help to superintendents in filling vacancies with capable teachers.

There are two advantages that appeal to me as of importance to the superintendent who relies on the teachers' agency, one of which is the saving of time for the superintendent for his other work rather than devoting too much time and energy in hunting teachers for his positions, the other is the pride that the agency so trusted will generally take in filling such positions with capable teachers.

Some Present Evils

Some present evils in the agency business sometimes existent as viewed from the standpoint of the superintendent are worth recounting. A few months ago an agency wrote me asking for a list of my vacancies and ended the letter by assuring me that for each vacancy in my corps filled through that agency I would be paid ten dollars. Doubtless this agency circularized a certain territory quite generally with this offer. I cannot imagine a more dangerous practice for a superintendent to engage in than that in which he would accept money for placing the candidates of an agency. First, such superintendent would have the battle to fight with his own conscience; secondly, any knowledge gained of this by teachers or patrons would certainly lead to the assumption that the choice of candidates had been made chiefly out of self-interest.

SYMBOL OF SERVICE TO CHILDHOOD — PLACQUE PRESENTED TO THE BOARD OF DIRECTORS OF THE WEST CHESTER COUNTY, NEW JERSEY, CHILDREN'S ASSOCIATION.

Another agency frequently sends me papers of candidates with a strong letter of recommendation and but one or at most two letters from references to give evidence as to the quality of work done by the applicant. Questioned as to whether or not the manager was acquainted with the candidates recommended, it was admitted that there was no acquaintanceship with the candidates. Perforce one is led to believe that the one or two brief notes appended to the history blank of the applicant were all the record of success known of the applicant. Such evidence appears all too meager and scarcely warrants the enthusiastic endorsements of the agency which relies on the information. Small wonder that such agency has but few candidates chosen from the list. A more elusive yet potential evil is the submission of candidates for positions not qualified for the position vacant out of the over-anxious desire to win a commission for placing a teacher, this desire out-weighing the all-important need of placing the most competent candidates possible within the limits of funds available for salary. Doubtless there are other evils apparent to none more than the agency man himself that have not been listed, but the two described are typical. None of these is irremediable.

Better Teachers a Goal

The superintendent, busied with his work, is glad of the help of the agency men. The superintendent desires to avail himself of that help whenever it will prove of mutual advantage for him to do so. Teachers are wanted of high order. Teachers who will direct the lives of pupils with that high light of a lofty purpose to guide them are none too plentiful, and the superintendent needs the aid of capable experts to assist him in this field. The superintendent learns to know certain agency men and comes to trust them and to rely on them. Probably there are few fields where this feeling of trust is basically more important than it is in this field. To the schoolman, held for his wise selection of capable assistants, the person who gives him good and worthy guidance in his choice is a friend indeed. Then, too, meetings in which agency men can discuss with schoolmen their problems of mutual service doubtless will help in removing many of the stumbling blocks that now strew the way. Education will help. The institutions need to turn out more *capable* teachers; they should be more courageous in eliminating the incapable and unfit; agency men and schoolmen should unite in encouraging the passage of laws that will raise the certificate standards of the several states, provide for certificate reciprocity, that will penalize teachers for violation of contract without good cause, that will provide better living conditions for teachers, that will elevate the teaching profession through a more secure tenure for school men and women. This latter suggestion may appeal as ironical when directed to agency men whose success is measured by the changes in teaching positions and vacancies filled. Para-

(Continued on Page 104)

Sani-Onyx and Sani-Metal Have Solved the Cafeteria Problem

Look For The "Raised Rim" Top

THE problem of selecting cafeteria equipment for your school is just as important as the selection of seats, plumbing or any other permanent equipment. Old fashioned wooden equipment, which requires constant refinishing, is being rapidly replaced by a conbination of ***Sani-Onyx*** with ***Sani-Metal.*** Hundreds of installations of this type have been made in schools all over the country —many more will be installed this year. Those responsible for school equipment realize that it is economy to purchase durable, permanent equipment – the kind that will look just as well ten years later as the day it was installed.

Sani-Onyx cafeteria counters and table tops are as hard and smooth as polished glass. This ***snow-white*** surface is always clean and inviting and can be kept in that condition by simply wiping with a damp cloth. This type of table top has a "raised rim", (an exclusive patented feature) which prevents spilled liquids from dripping on the floor or clothing. ***Sani - Metal*** Porcelain Enamel table bases will last a lifetime in any climate. This durable material resists the deteriorating effects of wet brooms and mops. ***Sani - Metal*** bases can be secured in white, brown, mahogany and grey color.

Write to the nearest fixture supply house or this office for catalog and full information on the ***Sani*** line of food and drink equipment. Send a diagram of your floor space and we will make a blue print lay-out of a complete installation free of charge.

Sani Products Co.

485 Sani Building North Chicago, Illinois

Canadian Factory: 284 St. Helens Ave., Toronto, Canada

Selling Organization for Marietta Manufacturing Co. and Chicago Hardware Foundry Co.

(Concluded from Page 102)

doxical as it may seem I am convinced that stabilizing the teaching positions and securing greater and more secure tenure will prove ultimately an advantage to the agencies. With increased tenure come better wages, a higher quality of teacher for which the public will more willingly vote adequate compensation. With this improved status there will come a more scientific method of placement, and a better satisfied clientele.

The Mutual Problem

The problem of both the agency and the superintendent is one in the obligation both have to fill teaching positions with only the most competent teachers available for the money paid. There is danger also in coupling the later phrase about "the money paid" with the sentence, because it is so easy for us to excuse a poor selection because of a small salary limitation. Both agency and superintendent must be conscious of the fact that a good teacher means a good school, and that a poor teacher, even though furnished with the best of tools and surrounded with the costliest laboratory equipment, will remain a poor teacher still and will accomplish little. Teachers to be of value must have lofty character, a high sense of integrity and withal the knowledge of and sympathy for children that will express itself in hard work in their behalf. The importance of selecting such teachers cannot be over-estimated. As Mr. D. H. Cook said in a recent issue of *The School Board Journal:* "The teachers' agency has been the principal laboratory in developing a science of teacher-placement and its elements used are the needs for teachers and the teachers' needs. Its apparatus is the great educational melting pot of America now kindled to a white heat by combustion of the social fabrics of other days that are piled high on the scrap-heap. The objective of the project is the Americanization of our youth." The most important factor to be considered is the group of children to be served. Neither agency nor superintendent should lose sight of that ultimate product of the school, the citizen of the next generation. To him should always be applied the doctrine of the golden rule, a doctrine more and more finding acceptance as a sound principle of all business. As agencies and superintendents cooperate to that end the problem of teacher placement will be largely solved, at least from the standpoint of that all important factor, the child.

OBERHOLTZER TO HOUSTON

Mr. E. E. Oberholtzer, for the last ten years head of the schools at Tulsa, Okla., has been elected superintendent of schools at Houston, Tex. Mr. Oberholtzer succeeds R. B. Cousins resigned.

Edison E. Oberholtzer is a graduate of the Indiana State Normal and holds degrees given by the University of Chicago and Columbia University. He has filled various positions as principal and superintendent of schools in Indiana cities. In 1913 he was elected superintendent at Tulsa which position he has retained until the present time.

Mr. Oberholtzer is an active member of the National Education Association and of the Oklahoma Educational Association and has contributed freely to educational literature. He became widely known to the school field through his work in connection with the Tulsa schools. He was in charge of the school system during the period of its most rapid growth and was instrumental in carrying out a very extensive program of school building which has made the city famous.

PERSONAL NEWS OF SUPERINTENDENTS.

—Supt. John B. Laidlaw of Niagara Falls, N. Y., in June will have conferred upon him the degree of Doctor of Pedagogy by St. Lawrence University, his alma mater, in recognition of his record and achievements as an educator. The honor comes to Mr. Laidlaw unsolicited and is in the nature of a reward for real, constructive service in the teaching profession.

—Mr. J. C. Brumbaugh is assisting the Indiana department of instruction in a survey of the rural schools in the vicinity of Granger.

—Mr. Clyde Moser has been elected supervising principal at West Conshohocken, Pa., succeeding T. J. Steltz resigned.

—Supt. F. M. Martin of Durham, N. C., has been reelected for the next year.

—Supt. Lloyd Spooner of Rockwell City, Ia., has been reelected for the next year at an increased salary.

—Supt. E. R. Sifert of Webster City, Ia., has been reelected for a term of three years, at an increased salary.

—Mr. Maynard M. Schell has been elected superintendent of schools at Alton, Ia.

—Mr. Owen Hammersley of Corning has been elected superintendent of schools at Mt. Ayr, Ia., succeeding Lee Jones.

—Mr. John B. Ritter has been elected supervising principal at Collingswood, N. J., succeeding W. Fowler Bucke.

—Supt. D. E. Walker of Culver, Ind., has been reelected.

—Supt. F. L. Winter of Burlington, Wis., has been reelected for a two-year term.

—Supt. C. A. Pattchin of Worthington, Minn., has been reelected for his eleventh term.

—Supt. C. C. Green of Rockdale, Tex., has been reelected for another term.

—Mr. G. O. Kelly of St. Edwards, Neb., has been elected to the superintendency at Bridgeport.

—Supt. Stephen Blackhurst of Shelbina, Mo., has been reelected for the next year.

—Lloyd H. Spencer, principal of the high school, has been elected superintendent of schools at Glenwood, Ia., succeeding Mr. Jessup.

—Supt. J. W. O'Banion of Ennis, Tex., has accepted a place on the summer school faculty of the State Teachers' College at Denton.

—Supt. D. M. Major of Groesbeck, Tex., has been reelected for another year.

—Supt. J. H. Head of Fort Stockton, Tex., has been reelected for the next year.

—Supt. C. D. McGoon has been reelected head of the schools at Marengo, Ia.

—Supt. Edmond Wroe of Greer City, S. C., has been reelected.

—Supt. Jeremiah E. Burke of Boston, Mass., has been reelected for a term of six years. Dr. Burke succeeded the late F. V. Thompson who died in office three years ago.

—Mr. E. H. Chapelle of Rockford, Mich., has been elected superintendent of schools at Charlotte. Mr. Chapelle succeeds C. H. Carrick who resigned after seventeen years' service.

—Mr. F. L. McCollum of Goliad, Tex., has been elected superintendent of schools at Brenham, succeeding Joseph C. Tucker resigned.

—Supt. I. A. Coston of Lufkin, Tex., has been reelected for an eighth year.

—Supt. J. M. Skinner of Ballinger, Tex., has announced his resignation with the close of the present school year.

—Supt. F. E. Ford of Lamoni, Ia., has been reelected for another year at the same salary.

—Supt. John S. Clark of Waukegan, Ill., has been reelected for another year.

—Supt. John O. Henderson of California, Mo., has been reelected for a fifth term.

—Supt. M. F. Beach of Moberly, Mo., has been reelected for a fifth term.

—Sujt. C. W. Garlock of Anita, Ia., has been reelected for a second term at an increased salary.

—Mr. A. H. Robertson has been elected superintendent of schools at Dowagiac, Mich., to succeed Leroy W. Stewart.

—Supt. Nieman of Magnolia, Ia., has been elected president of the Southwestern Iowa Teachers' Association.

—Supt. W. S. Smith of Excelsior Springs, Mo., has been reelected for another year.

—Mr. C. W. Weatherwax of Sioux Rapids, Ia., has been elected superintendent of schools at Missouri Valley.

—Supt. B. C. Berg of Newton, Ia., has been reelected for a third term, at an increased salary.

—Supt. W. L. Johns of Farmington, Mo., has been reelected.

Why Electric Equipment is Best for the School Cafeteria

THE application of electricity to school cafeteria equipment has been a big factor in overcoming many of the problems that School Boards have had to contend with in the operation of their cafeterias. Electric Equipment with its instantly available heat is particularly efficient in the school cafeteria where but one meal as a rule is prepared a day, yet during that short period capacity service being required. This type of heat is clean and easily regulated which makes it readily adaptable to varying conditions, whatever they may be. Albert Pick & Company will be glad to advise you in detail concerning the use of Electric Equipment in your particular school cafeteria and will explain fully the advantages and comparative costs of operation. You are cordially invited to consult with us without obligation.

ALBERT PICK & COMPANY
208-224 WEST RANDOLPH STREET
CHICAGO, ILLINOIS

Cafeteria of
GREENWAY HIGH SCHOOL
Coleraine, Minn.
W. T. Bray, Architect

This is one of the many schools that are now using Electric Cafeteria Equipment with great success. This cafeteria and kitchen were completely installed by Albert Pick & Company.

It will pay you to find out more about Pix Electric Equipment and the details of its construction. All you need to do is to mail the attached coupon and our Electric Equipment Booklet will be sent to you.

ALBERT PICK & COMPANY
208-224 West Randolph St., Chicago, Ill.
Please send me Booklet Y165 containing complete information concerning Electric Kitchen Equipment.
Name_____
Street_____
City_____ State_____
Official Position_____

Just Clip the Coupon

SCHOOL BOARD NEWS

AN ACHIEVEMENT IN CONSOLIDATION

Out in western Kansas, particularly in Logan and Thomas counties covering an area of 861 square miles, every boy and girl is enabled to obtain a high school education without leaving home. Eleven modern school structures have taken the place of 61 small one room schools.

The lowest valuation for anyone of the individual districts mentioned is a little less than a million dollars and the highest valuation a little more than three million. The average levy is between 11 and 13 mills and in several instances this will cover the cost of new buildings and equipment. The eleven districts are:

Monument—Eighty square miles, thirty-five pupils in high school, seventy in grades, 5 busses, 5 teachers, value of school plant and equipment $18,000.

Russell Springs—Seventy square miles, 30 pupils in high school, 50 in grades, 4 busses, 4 teachers, value school building and equipment $12,000.

Winona—One hundred square miles, 50 in high school, 125 in grades, 5 busses, 6 teachers, value of school plant and equipment $20,000.

Brownville—One hundred and twenty-five square miles, 40 in high school, 80 in grades, 5 busses, 4 teachers, value school plant and equipment $12,000. Located in country 14 miles from nearest postoffice.

Brewster—One hundred square miles, 50 pupils in high school, 80 in grades, 6 busses, 8 teachers, value school plant and equipment $100,000.

Levant—Fifty square miles, 28 in high school, 50 in grades, 3 busses, 5 teachers, $39,000 bonds sold for new building and equipment.

Colby—Twenty square miles, 125 in community high school, 325 in grades, three busses, 12 teachers, $125,000 invested in school plant.

Gem—Sixty-six square miles, 45 in high school; 90 in grades, 2 busses, 7 teachers, value school plant and equipment $70,000.

Rexford—One hundred and twenty-five square miles, 46 in high school, 100 in grades, 4 busses, 7 teachers, bonds for $100,000 sold for new school plant and equipment.

Menlo—Eighty-four square miles, 45 pupils in high school, 130 in grades, 5 busses, 9 teachers, value school plant and equipment $75,000.

Oakley—One hundred and twenty square miles, 106 in high school, 265 in grades, 9 busses, 16 teachers, $250,000 school plant and equipment.

The average length of the bus routes is 16.5 miles and the average cost per pupil per mile of transportation is 14 cents.

AMONG BOARDS OF EDUCATION

—The subjects discussed at the Lincoln County, Missouri school board convention were "What constitutes a Good School Board Member?" "The School Budget," "Playgrounds and Community Enterprise," "Care of School Property." The speakers were H. Weinard, R. I. Fisherk, D. E. Killam, J. L. Foley, Rev. O. W. Goodin, I. K. Jurgensmeyer, A. H. Monroe, G. C. Levengood and A. F. Elsea.

—Charles H. Lindlum, M. D., has been a member of the Hempstead, N. Y., board of education for a quarter of a century and is still serving.

—Mrs. Mark E. Reed was reelected for the sixth time a member of the Shelton, Washington, board of education. The new Irene S. Reed high school costing $77,000, was given by Mrs. Reed and her husband.

—William C. Wheeler and Mrs. Grace Watson have been reelected members of the Tacoma, Washington, board of education.

—A. G. Kampmeier of the Cedar Rapids, Iowa, board of education urges that all persons employed by the board known to be untruthful should be dismissed.

—The members of the Macomb, Ill., board of education are appointed by the mayor and confirmed by the city council. Upon petition of citizens, a vote will be taken in April to determine whether the board shall hereafter be elective or appointive.

—When E. Shorrock, who has been a member of the Seattle, Washington, board of education for many years, was asked to become a candidate for Mayor he said: "Run for office? Me? Not much. I can't afford it and besides I refuse to take the abuse that goes with a public job. My only compensation has been the realization that the work of the school board benefits every home in the city—but that in itself is enough."

—J. Arthur Johnston has been elected a member of the Charleston, S. C., board of education to succeed Theodore W. Passailaigne, deceased. The News-Post of Charleston hails Mr. Johnston as "a citizen of recognized ability, sound judgment and proved progressiveness."

—The corporation counsel of Oshkosh, Wis., has ruled that the school board acted within its legal rights in granting a twenty-day sick leave for teachers and in establishing a school visiting day. The opinion was given to determine the legality of the board's action.

—The city council at Newport News, Va., has disapproved the establishment of a summer school this year. The council held that the school system needed all the funds for the actual operation of the schools during the next year.

—Milwaukee, Wis. The school board has revised its rules and regulations for the conduct of the schools. One of the new rules provides that the janitors shall be under the immediate direction of the principal of the building and the general supervision is to be under the direction of the superintendent of plant operation.

—A financial survey of the larger school districts of the state of Washington has just been completed. The report shows that not only does the Walla Walla school district have more wealth per pupil but that the school levies are less, on an average, than in other school districts in the state. The average assessed valuation based on average daily attendance is 3,250; the assessed valuation, city of Walla Walla, average daily attendance is 3,666; the average district tax levy is ten mills; the district tax levy, city of Walla Walla is 8.4 mills; the total district tax levy, city of Walla Walla is twelve mills.

—The status of the Akron, Ohio, schools is exemplified in a remarkable series of charts and tables published in the board of education report. Superintendent Carroll R. Reed employs some thirty odd charts in showing the progress of enrollment for the past ten years, national

ities, teaching load, general control and the various professional considerations. The twenty odd tables which he presents cover attendance, teacher service, per capita costs, and financial statements. The members of the board are: Mr. Charles E. Smoyer, president; Mrs. A. Ross Read, vice-president; H. T. Waller, J. F. Barnhart, Mrs. W. Garrett, H. J. Huber, Walter Kirn. Frank D. McElroy is the assistant superintendent, H. S. Morse the assistant in charge of business affairs while Ralph H. Waterhouse has charge of vocational education and Chester A. Graham directs the Americanization work.

—A Pan-American pedagogical congress is to be held in September, 1925, at Santiago, Chile. The American educators are invited to participate. The Pan-American Union, whose headquarters are located at Washington, D. C., is exploiting the congress.

—"The platoon system seems to be working quite well in Detroit," said Hart Hanson, a member of the Chicago board of education. "But before it is adopted in this city's school system it should first be tried out for a year or more in one experimental school in order to determine whether the conditions here are adapted to such a system. A platoon system successful in Detroit and some other spots has proven a failure in other places, according to the information given us, and may prove a still greater failure in Chicago. There is only one way to find out whether a platoon system is feasible for Chicago, and that is by first giving it a fair trial in one school for a sufficient period of time and determining how it works out there before adopting it for the entire school system."

—Lansing, Mich. The school board recently engaged in a controversy with the city council over the use of school buildings. The council had designated thirteen buildings as voting places but the board refused to dismiss classes permitting the rooms to be used for voting.

—The school board of Jerseyville, Ill., has passed a rule barring solicitors from grade schools during school hours. The rule became necessary because of the number of persons soliciting for the sale of goods to the schools.

—Akron, O. In dismissing a temporary injunction order, the court has recently permitted the local school board to proceed with the erection of the Garfield High School and has dismissed the petition seeking to prevent the building of the school. The counsel for the plaintiffs has appealed the case to the higher court.

—"The New York City board of education has been singularily democratic in its dealings with the teachers," recently said Miss Olive M. Jones, president of the National Education Association. "Interference with their freedom is almost unknown. The teachers are free to express their opinions without regard to consequences."

—Before the old school board known as the "Van Noort crowd," of Paterson, N. J., went out of office it appointed two school principals. When the new board got into office it ousted them, holding that undue political methods had been employed. The Guardian, a local newspaper commenting on the situation, says:

"It should be understood that in the move on the part of the new board of education to oust the last-minute Van Noort appointments no reflection was intended upon character or ability of those favored. That point has been set forth in these columns a number of times. Beyond that, a principle is involved that can not be disregarded. That principle deals with the question as to whether a board of education, just before it is to pass out of existence, can with justice and consistency suspend all rules and then proceed to elevate favorite teachers to principalships without the usual examinations, to create new positions to be saddled upon an incoming administration, the need for which is seriously questioned, and to make a number of other appointments.

"Surely high-handed action of this kind on the part of an administration about to give up the ghost should be amenable to restraint and revision on the part of a new regime, selected by a majority of the voters at a regular election, and pledged to give the people an honest and economical administration of its public affairs."

—"Many able men become members of a board of education, knowing full well their duties and responsibilities as members of a board of bank directors, a department store, manufacturing establishment, or a railroad, but fail to relate that former experience to their work as members of the board of education," Says Supt. J. H. Beveridge of the Omaha, Nebraska, schools. "What surgeon would think of asking the board of directors of a hospital how to diagnose a case or perform an operation? Draw your own conclusion."

—Mrs. R. G. Stoakes is the first woman to be elected to the school board at Traer, Ia. Mrs. Stoakes defeated J. T. Ames, candidate for re-election.

—A compromise measure to bring together the contending forces of city governments and school committees in Massachusetts engaged in a controversy over the powers to be given the latter has been presented to the legislature. The essential feature of the new bill is a referendum to the voters of each city and town on the question of control of school property and the appointment of school janitors, as well as employes of the school department.

It provides that in every city or town where complete control is not at present vested in the school committee, there shall be placed on the ballot at the state election in November the question as to whether such control is to be given. The act is to become effective only if the voters accept it.

Another provision of the bill is that the superintendent of schools shall select all candidates for appointment as teacher, janitor, or any other position in the employ of the committee. No person not nominated by the superintendent may be elected by the school committee to any such position.

—The school board of New Haven, Conn., has taken out compensation insurance for the employees of the education department numbering in all about 1,200 persons. Under the plan a premium of about $1,700 is paid, with the added advantage of possible reductions at the end of the year.

—Atlanta, Ga. Several plans have been proposed for amending the charter governing the method of control of the city schools. Two measures have been introduced in the council, both seeking the elimination of the present board. One plan seeks to establish a board of six elected from the city at large by the people, and the other provides for a board appointed by the city council from the city at large. The latter plan was in force previous to the adoption of the present charter which removed the power of election from the city council.

(Continued on Page 111)

(Continued from Page 108)

—The school board of Coatesville, Pa., recently engaged in a controversy with the local milliners over the custom of the home economics department in selling the products of the classes in millinery. The milliners sought the passage of a rule barring girls more than 20 years of age from millinery classes.

The board agreed to a rule prohibiting the sale of millinery goods within the confines of the schools. It took the position that sales made after the goods left the school building were not under their jurisdiction and therefore could not be controlled by school rule.

—Vancouver, B. C. By unanimous vote of the school board, it has been decided not to continue daylight saving this year. The action was taken on the ground that daylight saving was harmful to the school children.

—Winchester, Va. Mrs. Herbert S. Larrick has been elected a member of the local school board. An entirely new board has been elected by the city council. Of the old board, John M. Steck, Stewart Bell, Dr. H. H. McGuire, William G. Hardy and J. Fred Goss were reelected. The new members comprise Mrs. Larrick, Mr. W. R. Talbot, Mr. Howard Shockey and Mr. John H. Rosenberger.

—Schools for feeble-minded and subnormal children are steadily increasing their activities. In 1900 there were only 29 such schools with 10,217 pupils. Now there are at least 200 schools with an attendance of over 65,000 pupils.

—Forty-five crippled children of school age at Grand Rapids, Mich., have been enrolled in a special orthopedic department. The department has been organized in response to a demand for educational advantages for these children who up to this time had not attended any school.

—A pupil-and-teacher association has been formed at the Lanton School in Maury County, Tenn., the purpose of which is to see that every poor child in school has the proper food, clothing and books. To become a member, one must give some needed article to a poor child. There are no dues but each member gives as he wishes.

—Supt. W. E. Miller, of Knoxville, Tenn., has announced a new plan for determining the salaries of teachers. In the future, salaries will be based on the efficiency of the teachers, as determined by a special rating plan recently devised for the purpose.

—Lee M. Hutchins in his campaign for reelection to the Grand Rapids, Mich., board of education urged the following: "The position of a member of the board of education is one that deserves the service of men of the soundest business training and experience. It deserves, too, service by a woman of well-balanced intelligence and sound knowledge of public affairs. More money is spent by the taxpayer on the maintennance and development of the public schools than on all other municipal purposes together. The board of education has the responsibilty of seeing that every dollar of that expenditure buys a dollar's worth, that construction is of wise and sound character and that economy and efficiency mark the large business affairs of the city school system.

—The school board of Wadsworth, Ohio, consisting of President Dr. M. W. Everhard, Vicepresident R. E. E. Zechiel, Clerk Charles Holbein, A. L. Nolf, A. D. Blough and Oscar Mcodemus, presented the taxpayers with a complete statement of the school finances, showing a deficit of $15,370. A citizens' committee will aid the board in keeping the schools going to the end of the regular term.

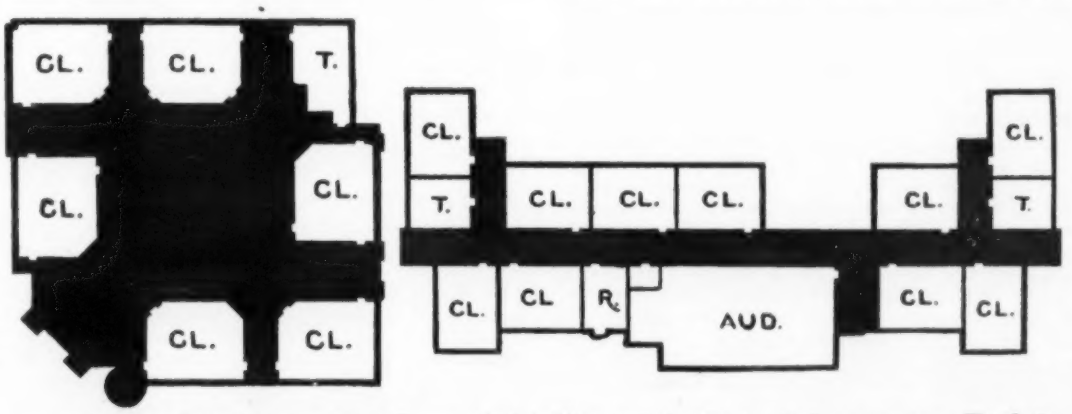
IMPROVEMENTS IN SCHOOL BUILDING PLANNING

The twentieth annual report of the Denver city schools contains some very interesting material on the planning of school buildings and the efficiency of the newer methods. Two years ago the Denver board of education obtained a six-million-dollar bond issue with the understanding of a further bond issue of $2,400,000 to be voted in 1924. In carrying out the provisions of the bond issue the board of education arranged for the following organization:

"A. Nineteen of the leading architectural firms of the city of Denver were chosen to design the various buildings.

"B. One of the leading heating and ventilating engineers of the West, a resident of Denver, was employed to design the heating and ventilating systems for these buildings. This engineer works under the direction of the chief engineer of the schools. A deduction will be made from architects' fees to cover the cost of these designs.

"In order that the board might be fully advised as to the best systems of heating and ventilating, and as to the results of the latest research in this field, two consulting engineers of national reputation were brought to Denver to consult with



The diagram at the left represents a Denver school building erected about twenty-five years ago. The floor area is divided at the rate of 40% for classroom use and 60% for corridors, toilets, stairways, and storage. The diagram at the right is a building now under construction. The division of the floor area is 60% classroom space and 40% accessories space.

the board and its engineers and architects, and to make written recommendations as to the best systems to use. Every possible precaution will be taken to insure that the new school buildings embody sound principles of lighting, heating, ventilation, and sanitation.

"C. In the planning of school buildings the board of education is proceeding on the assumption that these buildings must be designed first of all for school purposes. To this end the board has required the architects to develop plans in consultation with the school staff, and building plans are presented to the board with the recommendation of the school staff for their adoption. The school staff in turn proceeds on the assumption that those who have spent years in teaching and who know the needs of the schools from the building standpoint should be consulted in the planning of buildings.

Procedure of Planning

"In planning the buildings the procedure is as follows:

"1. The assistant superintendent of schools in charge of the department of classification and statistics (research) was chosen because of his previous experience in supervising the designing of school buildings. This assistant superintendent directs the work of architects in the planning of all buildings from the educational standpoint.

"2. Committees of teachers and principals were asked to submit recommendations regarding the details of rooms for the teaching of particular subjects. For example, a committee consisting of one teacher of chemistry from each high school in the city was asked to prepare recommendations for the design of the chemistry laboratories and lecture rooms for the senior high schools. The report of this committee was made in the form of a diagram of the rooms, showing the furniture and equipment placed in them, with explanatory notes. In a similar manner committees representing the elementary and junior high schools have been consulted regarding plans.

"3. Standards that have been developed by authorities on the planning of school buildings are constantly consulted in order to insure that the plans are sound in their design from a technical standpoint. A careful attempt is being made to preserve the proper balance between the amount of space given to the various parts of the buildings, such as classrooms, corridors, auditoriums, administrative offices, etc. It has been found possible to effect great economies on buildings by careful supervision of design."

The accompanying diagrams will show the vast change which has come as a result of the improved planning. In the case of diagram one, the old elementary building provided six classrooms having an area of forty per cent of the entire floor space, while sixty per cent of the area was devoted to corridors, toilets, stairways, storage and waste space.

Diagram two shows a recent building in which sixty per cent of the total area is devoted to classroom purposes, while forty per cent is devoted to corridors, toilets, rest room stairways and storage.

STANDARDIZATION OF EDUCATION

Dear Editor:

An examination of a recent issue of your magazine stirs up an old irritation relating to the habit of our educational experts which is probably best expressed by the word "Standardization." By a certain standard they measure off everybody and everything as "Fit" or "Unfit," as "Competent" or "Incompetent," and their deductions based on these rules are broadcasted everywhere and accepted by people, and especially by those in charge of educational affairs, as absolute facts and truths, and work great harm and injustice to school and teachers.

While my experience in educational matters may be deemed very unorthodox, and every contact I have had with socalled educational experts always leaves the impression that they think they know everything about the subject and I know nothing. Yet I will try to lay some basis of my qualification to express on opinion before continuing.

To begin with I was one of fourteen brothers and sisters, eight of whom completed their college courses, two of them Rhodes scholars. Two others were normal school trained—nine of the fourteen teaching to some extent, and two making that a life profession. Three of them are lawyers, and two clergymen. My wife is a trained teacher, and after raising five children is again teaching high school. Four of our children have attended three different colleges. For fifteen years my contact with school was largely as athletic coach (without pay) chiefly in football, and then another fifteen years as acting chairman of the school board, which in a Vermont town means doing about everything except actual teaching and janitor work, and includes the employment of all workers including teachers and superintendents. Maybe a better view of our ideas might be had from the fact that all our teachers have been asked to return next year, our principal for his eighth consecutive year, that over half of our high school students are tuition pupils from outside our district, that about 50 per cent of our primary pupils complete high school, and about 35 per cent of our high school graduates enter college. And yet almost without exception the educational experts with whom I necessarily come in contact leave no doubt of their impression that we know nothing about boys and girls, nothing about teachers, and nothing about education. If the foregoing permits me any possible reason for having an opinion, I would proceed; viz.:

1. A standardization based on assumption that fitness and efficiency can be measured by a set rule or rules, is entirely false.

2. The idea that knowledge or education can be measured by way in which it is acquired is harmfully erroneous.

3. That it is impossible to employ best possible educators when restricted by such rules.

4. That many educators listed as most fit by such rules are much less fit than many who are not so listed.

5. That an omniverous reader and student of good literature and current events is at forty years of age much better educated than many of these standardized persons at the same age.

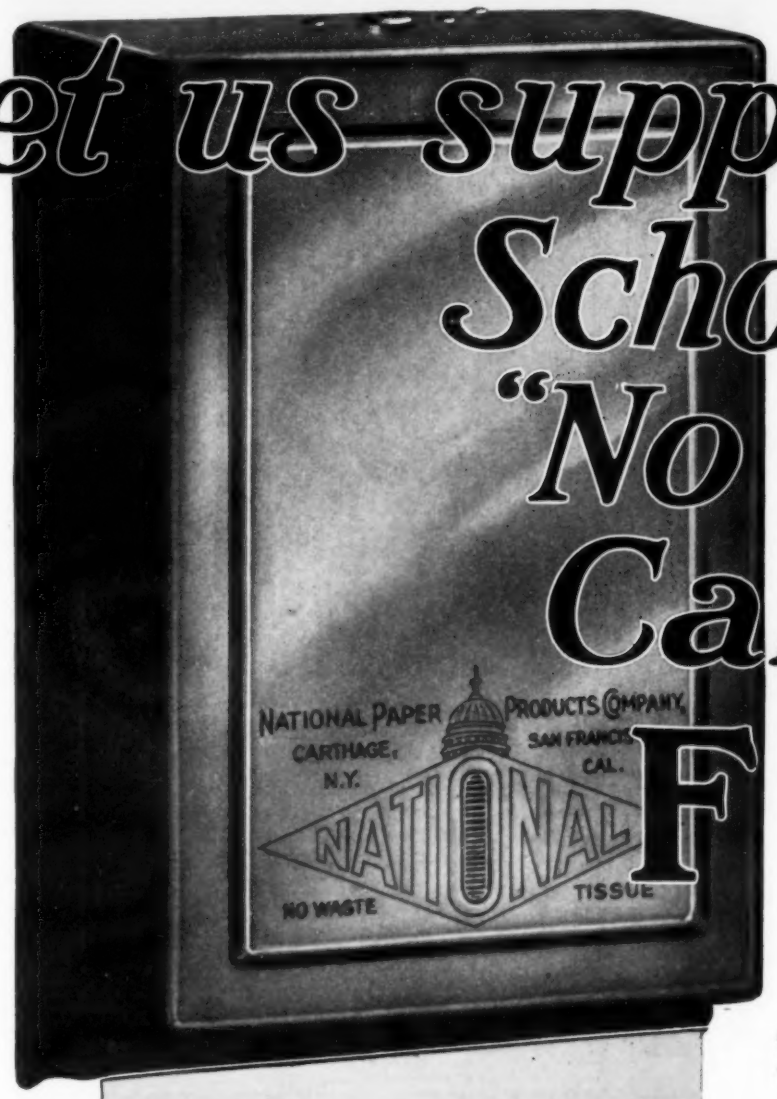
I have known boys of 18 years who were much better read and versed in general history, general literature and current events than some of these standardized experts. In short, knowledge is knowledge, fitness is fitness, no matter how developed or obtained; no matter how well or poorly paid. The common measure and criterion of such qualities are largely arbitrary and false.

Very Truly,

John J. Wilson,

Bethel, Vermont, March 15, 1924.

Let us supply your Schools with "No-Waste" Cabinets FREE!



The use of "No-Waste" Toilet Tissue in "No-Waste" Cabinets enables hundreds of schools throughout the country to save 20% to 30% on the net cost of toilet paper.

"No-Waste" Toilet Tissue Safeguards Health.

Economy and health are combined in "No-Waste" Toilet Tissue. It is made from fresh, clean spruce wood only; no old waste newspapers are used in its manufacture.

"No-Waste" Cabinets, finished in white, olive or nickel, are leased without charge to schools. All we ask is that "No-Waste" Toilet Tissue be used as long as we continue to supply it at fair prices that mean economy.

When writing for samples of "No-Waste" Tissue and "No-Waste" Cabinets ask also about "Public Service" Towels in the special Junior Size for schools.

NATIONAL PAPER PRODUCTS CO.
43 Furnace St.,
CARTHAGE, N. Y.

World's Largest Manufacturers of Paper Towels.
Representatives in All Larger Cities.

National Paper Products Co., 43 Furnace St., Carthage, N. Y

If, without obligation to us, you can prove that you can cut our washroom expenses, we will be glad to have you do so. Please send samples and full information, per your offer in the American School Board Journal.

Name.....

Address.....

Sign and Mail this Coupon →

"Public Service" Towels — NATIONAL — "No Waste" Toilet Tissue

DURAND
STEEL LOCKERS

WHEN the architect's plans are first submitted, it is not too early to consider the location of lockers and the types of lockers best suited to the needs of your school.

Here a Durand representative can help you. His suggestions, based on wide experience, may be the means of saving space and promoting convenience.

In planning locker arrangement, it is always to be remembered that Durand Steel Lockers are of evident quality and handsome appearance. There is no article of furniture, indeed, which reflects more credit on the school.

DURAND STEEL LOCKER CO.

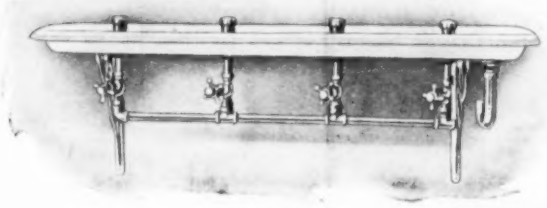
CHICAGO
DETROIT
NEW YORK
PITTSBURGH

As The Schools Progress Let Sanitation Prevail

A 63.

CENTURY Sanitary Drinking Fountains will bring Health, Happiness and Sanitation. Children are more susceptible to infectious and contagious diseases while going to school. Becoming dry and thirsty they are willing to drink from any source, thus catching germs from faucets and cups.

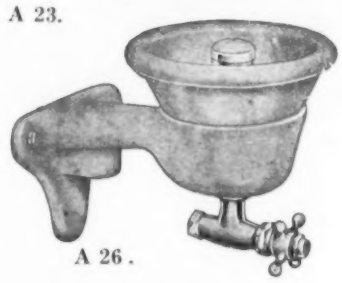
"PLAY SAFE" and install CENTURY Sanitary Bubbler Fountains.



A 23.

These fountains can be had in various styles and sizes. Style A 23 is most practical for lavatories and school yards. Style A 63 and A 26 are most practical for corridors where they are accessible to adjacent rooms, etc.

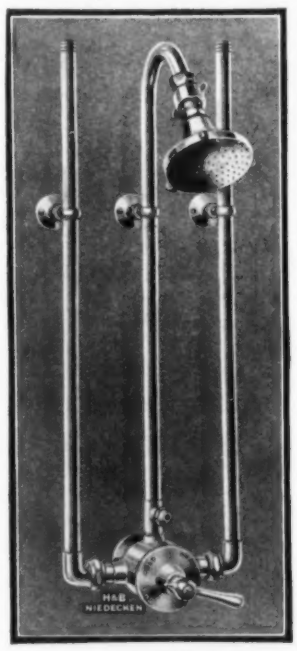
Write today for complete illustrated catalogue and special prices applying to the Educational Trade.



A 26.

CENTURY BRASS WORKS, Inc.
BELLEVILLE, ILL.

THE INCOMPARABLE
NIEDECKEN SHOWERS
PATENTED



Facts
NIEDECKEN SHOWERS

Are giving satisfactory service under trying conditions, some for years, in the largest shower installations in the world.

THE LOCK SHIELD FLOW CONTROL which regulates the force of water from the showerhead can be set to give a determined quantity of water and cannot be tampered with.

PERFECT CONTROL
insures economy of water and fuel

The Heart of a Shower Is the Mixing Control
NIEDECKEN MIXERS
Are Practically Everlasting

Write for Bulletin S. B. 15X

HOFFMANN & BILLINGS MFG. CO.
MANUFACTURERS SINCE 1855.
MILWAUKEE. U. S. A.

Economy in Educational Supervision

Some Ohio Views Based on the Ohio Situation

ECONOMIES IN THE TEACHING LOAD

—A committee of educators dealing with the subject of effecting economies by a reorganization of the teaching load made a report at the recent Ohio Educational Conference through Superintendent A. W. Elliott of Mount Vernon, Ohio.

Mr. Elliott approaches the subject by noting that "Instruction costs mount up to 72 1/3% of the total expenditures. Operation constitutes 10.66% of total cost. Maintenance 5.01%, fixed charges, 4.02%, general control 3.74%, auxiliary agencies 2.93%, and general supervision 1.24%. It is impossible to effect any great savings within those departments whose percentage of cost bears so small a ratio to the total expenditures. But when we consider the instruction end which is nearly three-fourths of all school costs we have here the greatest opportunity to effect economies. And yet we are working on dangerous ground when we tamper with the support of the department of instruction for this department is the nerve and sinew of our school systems.

"Accordingly, this committee proceeds with extreme caution before suggesting any increase in the teaching load. No addition to class enrollment should be tolerated unless careful and trustworthy research data will approve and warrant such a procedure.

"As we proceed to study the economies that may be effected by a reorganization of the teaching load, two avenues of approach are presented to us, (1) by increasing the number of class periods and lengthening the school day and, (2) by increasing the class size. Many modifications of these general heads may be made. Both must be studied carefully in order that the present level of accomplishments, at least, may be maintained and the resources of our teaching power completely conserved."

The committee then suggests an economy to be achieved in the following manner: "There are a few over 4000 teachers in the city high schools of Ohio. If they receive an average annual salary of $1800 we are expending $7,200,000 for instructional purposes in our city secondary schools. The State Director's report indicates that we have enrolled 99,175 pupils in the aforesaid schools. This discloses the quotient that the average state wide teacher-pupil ratio in the city high schools is 1 to 25. A further quotient gives the average cost per pupil for instructional purposes $73 per year. The above teacher-pupil ratio is the one required by the North Central Association of Colleges and Secondary Schools.

"With master teachers at the desks, the teacher pupil ratio should easily be increased until it reaches at least 1 to 35 and at the same time elevate achievement levels. For then we should have a splendid opportunity of ridding our schools of the weaklings of the profession. Further, this procedure, even if no increase in salaries were made, would reduce instruction costs from $7,200,000 to $5,140,000, thus effecting a direct saving of $2,060,000.

"However, the Committee believes that these master teachers are deserving of an increase in compensation. Let us grant them a 12½% advance. This brings the instructional costs up to $5,782,500 as compared with the present costs of $7,200,000. Thus we see that this scheme saves the city high schools nearly **one and a half million dollars each year.**

"The saving of a million and a half dollars is worth while, but that is not all. A 12½% advance in the salaries of our best teachers will reflect in contentment and satisfaction as well as even better work. It will rid the schools of the weaklings of the profession. Surely a very desirable attainment. It will reduce the number of necessary classrooms, thus rendering a useful service to both the building and contingent funds. But chiefest among these benefits is the promise that it will raise the levels of achievements. Far better teachers will be at the desks. Increased compensation wil continue to invite and induce the best talent and product of our schools to enter the teaching profession.

"It is quite likely that we would today have a higher state wide teacher-pupil ratio in the high schools of Ohio were it not for the fact of the inhibitions placed upon us by the fiat of the North Central Association of Colleges and Secondary Schools. This restraint is a relic of the old regime of opinion. Happily this regime is rapidly passing out of existence. The restraint of the aforesaid Association has cost Ohio schools millions in money with scarcely a cent's worth of added efficiency. If the Association during these years of financial stringency had required of us certain and definite achievements, regardless of the specific details by which we reached definite ends, we should today find ourselves in a more healthy financial condition.

"Instead of fixing the teacher-pupil ratio arbitrarily at 1 to 25, the North Central Association should set about to determine by scientific research just how class size should be governed. The economical size can never be arrived at by the fiat of opinion. The subject taught and the teacher teaching have a great deal more to do with the economic size of the class. With school costs mounting higher and higher, it is no time to settle so weighty a matter by mere opinion as the Association has done. Let us rather accept the conclusions arrived at by thorough investigation and research. The results will be a decided improvement in the achievements of our schools, and we shall be relieved of the annoyances of heavy deficits at the close of each school year."

ECONOMIES IN SCHOOL SUPERVISION

In discussing the subject of economy in school administration at an Ohio educational conference C. R. Reed, superintendent of the Akron schools, speaking for a committee, demonstrates that the medium cost in 43 American cities for business administration is 97 cents and for educational administration, $1.38, making a total of $2.35, and contends that the elimination of supervision would not constitute a saving.

"The way to effect economy in supervision is by improving its quality as to make it an acknowledged agency by which economies are brought about throughout the school system," he says. "Those who are responsible for the administration and supervision of schools throughout the state must see to it that such supervision is improving the quality of instruction, thereby reducing the amount of retardation and elimin-

ating waste within the school system. The question does not concern so much the amount of money spent on supervision as the results of that supervision as it effects the boys and girls in school. Any saving in school expenses which reduces the quality of service rendered is not a real economy.

"Your committee recommends that as a means of eliminating waste in the administration and supervision of the school system a definite outline be made giving in detail the duties of each person in this part of the school system. One source of waste in any organization is indefiniteness and purposeless effort. When each person has a clear statement of his duties, frequent checks should be made by the superintendent of schools to see that these duties are being performed. Regular reports should be required of supervisors, assistant superintendents and other administrative and supervisory officers so that each position may justify itself by the results attained in increased efficiency in the school system."

Mr. Reed reports that his committee is absolutely opposed to any reduction in teachers' salaries. He then argues as follows: "The large cuts which are sometimes necessary in school expenses should be made by reducing the quantity of service rendered by the school system rather than the quality. There has been a tendency for the last ten or twenty years for the school system to gradually attempt to correct the mistakes of the municipality and to assume more and more the duties of the home. We may have arrived at the time in educational history when the tax situation demands that the trend in this direction be stopped and that eliminations be made in the services rendered in so far as those services are not concerned primarily with the instruction of girls and boys in school.

"All of these sevices have been intoduced into the school system as a result of the growing demand of the public that the schools assume a larger responsibility for the welfare of citizens. Many of these features are exceedingly popular and desirable provided we have the money to pay for them. Possibly one of the ways to find out just how much they are desired would be to eliminate them from the school system and put the issue up to the citizens. Among these items are health supervision, adequate playgrounds for all the schools, free use of school buildings outside of school hours, citizenship training for foreigners, extension work at night for adults, open-window rooms, dental clinics, and other activities of like nature."

ECONOMIES IN SCHOOL ADMINISTRATION

After citing the several laws of the Ohio school code in which mandatory studies are enumerated Edward D. Roberts, assistant superintendent of the Cincinnati schools discusses the economies to be effected in supervisory and administration organizations.

"It would seem evident from this statement," says Mr. Roberts, "that the mandatory provisions of the statutes are not encouraging reduction in the supervision and administration of the schools. It may be assumed, too, that future sessions of the legislature will add other requirements, and so confirm us in our belief that economy here is not to come through law.

"Only as school administrators come to determine what effective supervision is, what qualifications competent supervisors should possess, what limitations time and space put upon the service of such supervisors, and what are the minimum essentials in the field of supervision, below which a present day school system can not go, shall we be able to limit costs in the fundamental field of school organization, and plan real economies. It may be expected that students of school administration will give their attention to this field, in a critical, constructive survey, and then recommend modification of our present organization, to effect economy."

Mr. Roberts adds the following as his judgment: "Indeed I feel that the schools are not yet costing enough, if one may judge by the manner in which opportunity is offered and by the success of the appeal made by the school's offering to the children and youth for whom the opportunity is provided. It is my fixed conviction that there will be a constantly increasing willingness on the part of communities to add to their tax burdens in the support of public education as there is a larger understanding of the value of the schools to society and a growing appreciation of the service rendered and the result produced."

SOME BY-PRODUCTS OF TESTS

In discussing the subject embodied in the title above given Superintendent U. L. Light of Barberton, Ohio, holds that the first and most important by-product of achievement tests is the improvement of the teaching act. In an address given before the Ohio Educational Conference he maintained that whenever the results of a test are given in a way as to be clearly comprehended the reactions are the following:

"(a) There is first recognition of the fact that a certain condition exists. This condition is not determined by the estimate of the teacher. The opinion of this or that supervisor has nothing to do with it. It's an impersonal, cold-blooded proposition.

"(b) An inquiry into the cause of conditions. Why does the group taught by a certain teacher rank lower than that taught by another teacher? Here the question of the comparative abilities of the groups comes in. It's refreshing to a superintendent to have teachers recognize this problem and suggest means of ascertaining facts concerning the various groups. High achievement may be due to superior intelligence regardless of the teaching or average intelligence and good teaching. Low achievement may be due to average intelligence, and poor teaching or low intelligence regardless of teaching; but the one fact remains, that a teacher with intelligence enough to teach will respect these facts, when they are presented. And then

"(c) A feeling that after all teaching efficiency is measured by results. The comparison of results insures a checking up of processes and methods together with a determination to reach a higher standard of achievement.

"Negative results are not necessarily discouraging. The important thing in the educative process is not technical efficiency but progress, growth, development. Results show definite reactions. Pupils repeat the same mistakes in reading problems or in going through the fundamental processes. These call for definite remedial steps. Where tests have been administered there has grown up definiteness in instruction and positive, clearly defined, remedial measures.

(Continued on Page 119)

(Continued from Page 116)

"(d) A serious attempt to ascertain just what good teaching will accomplish. We have long said that in teaching we attempt to build up knowledge, habits, skills and appreciations.

"Foster says that there are five results of good instruction: 'knowledge, thought power, appreciation, efficiency in expression and application and permanency.' There is no better way of knowing to what extent we are accomplishing what we set out to do than by applying standard measures to the results to which the methods of measurement are applicable. Progress in civilization has depended very largely on our ability to measure. Many of our modern inventions were delayed until minute distances could be measured. Progress in the refinement of the teaching act is conditioned upon the determination of objectives and the degree of accuracy with which we can measure quantitatively the progress we are making.

"The second by-product is a check on the judgment of the teacher. The ranking of pupils from the standpoint of a teacher is a very complex problem, one that becomes more complex as pupils progress in their work.

ANNUAL MEETING OF THE MICHIGAN ASSOCIATION OF SCHOOL SUPERINTENDANTS AND SCHOOL BOARD MEMBERS

The 51st annual meeting of the Michigan Association of school superintendents and school board members was held in Ann Arbor on April 2, 1924. The main topic was School Taxes. President Harvey B. Wallace, of Highland Park, opened the meeting with brief remarks depicting the general tax situation, characterized by largely increased demands, high prices, widespread unrest because of tax burdens, and general necessity for such a conference in which the whole problem should be reviewed and counsel taken as to future policies.

A large part of the session was devoted to a presentation by various individuals of their answers to the question, "Why spend school money for" the various activities, methods and courses that have been from time to time and still are, frequently termed "fads," "frills," "ginger-bread" and "tomfoolery." The speakers included Mr. W. B. Arbaugh, Mr. P. R. Cleary, treasurer of the Ypsilanti board of education, and Prof. George E. Myers, of the University of Michigan vocational department.

Mrs. Laura F. Osburn, president of the Detroit board of education, speaking upon the subject "Mental Tests and Grouping of Children According to Mentality," said that tax expenditure for any educational activity is justifiable when such activity contributes materially to the efficiency of the educational process, or when it effects an economy in administration. Mental tests and research work qualify on both these counts. Their results furnish the basis for intelligent judgment of educational policies, and a consequent continuance or abandonment of the same.

Mrs. Dorian Russell, president of the Michigan State Federation of Women's Clubs, and a former member of the Grand Rapids board of education, proved conclusively that money may be well spent upon "Night Schools and General Community Service." "The people demand these services," said Mrs. Russell, "and no one has a right to demand that for which he is unwilling to pay."

Dr. John Sundwall, professor of hygiene at the University of Michigan, discussed health education.

Supt. M. W. Longman of Muskegon, submitted a list of 64 Michigan cities whose median total tax rate is $38,36. The median school tax rate of the same cities for the past year was $14.44. The median per cent of the total tax devoted to school purposes was shown to be 37.

Supt. J. H. Harris of Pontiac, discussed in an instructive manner, the question, "Are School Costs Really High?" He admitted that costs might be considered high but not really so. He spoke of the depreciated dollar with which school services must be purchased, the enlarged conception of the role of education in the development of society and the preservation of democracy, and the enormous increase in school attendance. Rather than the cutting of expenses by robbing children of their birthrights, he proposed a more scientific distribution of funds and the equalization of taxation.

Supt. T. J. Knapp of Highland Park, spoke on Future Tax Rates for Schools. He declared that the present tax rates are dependent on the demands which people make for increased service in the schools.

Supt. E. E. Fell, of Holland, discussed the topic, "How to Conserve the Products of this Meeting."

The Committee on Resolutions which consisted of Mrs. C. E. Vowles, member of the Mt. Pleasant board of education, Supt. W. A. Greeson of Grand Rapids, and Alvin Dice, member of the Albion board of education, presented among other resolutions, the following:

"There is no doubt that there is very great inequality of educational opportunity in Michigan. There are school districts that are so lacking in taxable property, that it is impossible for them unaided to give an adequate education to their children.

"Your committee believes that it is the duty of the state to equalize to some extent at least, educational opportunities in the state and that this equalization of educational opportunities should be accomplished by the laying of another tax for this purpose, without disturbing the present constitutional provision for the distribution of the Primary School Interest Fund."

It was also voted, after considerable discussion, that it is inadvisable for the state department to send out requests asking the school to aid in philanthropic enterprises connected with restorations or relief in Europe or for similar causes.

Following the afternoon session, the members adjourned to the Michigan Union where a banquet was held. Dean A. S. Whitney of the Department of Education, of the University of Michigan, gave a much appreciated address on The Superintendent.

The meeting was characterized by an unusual attendance and interest on the part of the school board members. The enrollment secretary reported dues paid for those present, who numbered 188.

The following officers were elected: President, Supt. Leslie A. Butler, Ann Arbor; Vice-President, Mr. H. A. Hamilton, Charlotte; Secretary, Mr. H. C. Daley, director of surveys at Highland Park.

charge of a full-time driver. Both trucks are now on their second year's run.

The third stop was at the Pintlala Junior High School. This building is sixteen miles from the County Court House and fifteen miles from the Catoma School, and is located on a sixty-acre site. The school was occupied in September, 1922, and cost including equipment, $70,000. The school represents a consolidation of nine small schools of the one-teacher, two-teacher and three-teacher type. It has a present enrollment of 166 pupils. Four trucks are used in carrying the pupils to the building and they are in charge of three men and one boy as drivers. Three of the trucks were purchased in 1919 and are in their fifth year of operation, while the fourth was purchased in the summer of 1922 and will soon begin its second year's run.

The fourth stop was made at the Ramer School. This building is 26 miles from the County Court House on one of the state highways and is fifteen miles from the Pintlala School. It includes a home site of ten acres, a high school site of 53 acres and an elementary school site of two acres. The building was occupied for the first time in January, 1920, and cost, including the teachers' home and equipment, $150,000. The building represents the consolidation of twelve one-teacher and two-teacher schools in the district. Pupils who complete the work at this school are prepared to enter the Ramer Senior High School. The school has an enrollment of 345 pupils at the present time. Eight county trucks and one privately owned truck are used to transport the pupils to the Ramer School, and they are in charge of five men and four boys as drivers. Four of the trucks were purchased in 1918 and are in the sixth year of operation; two were purchased in 1919 and are in the fifth year of operation, and three others were purchased in 1922 and are entering the second year of operation. Out of 225 pupils enrolled, 190 are transported with the aid of the trucks.

—During the past year the Library Extension Division of New York State sent to schools a total of 1,186 traveling libraries, containing 36,637 books. The larger part of the school traveling libraries goes to the district schools. They contain the best books for children and young people and are intended to give children remote from public libraries an opportunity to form good reading habits. The traveling library supplements the work of public and school libraries where the greatest need exists, and preference is regularly given to rural districts and small towns.

—Edger H. Corttis, a member of the Thompson, Conn., board has been drawing pay for services as a school board member. Notice has been served upon the town treasurer to the effect that this is illegal.

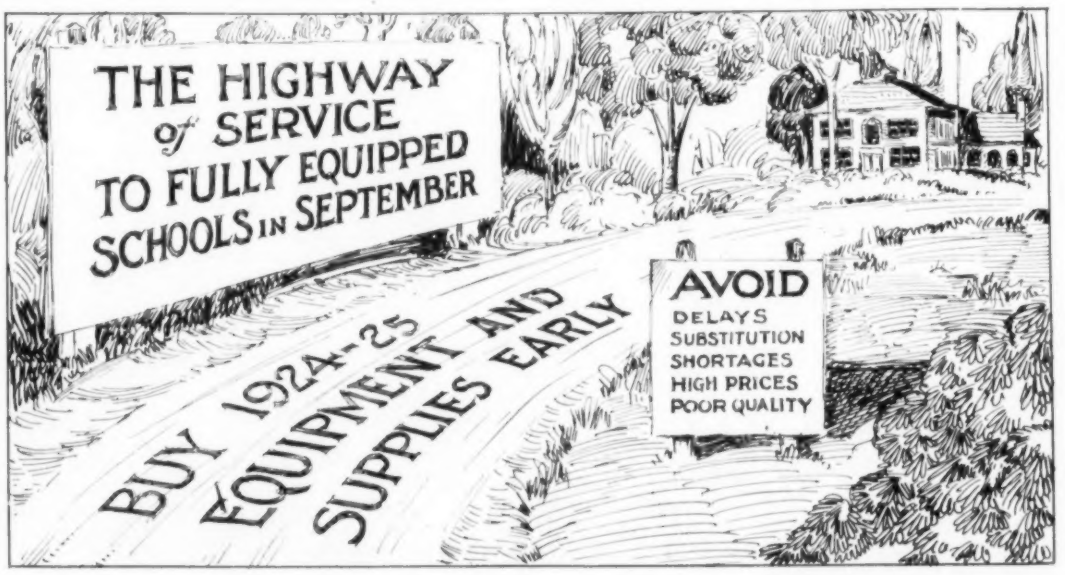
—J. D. Collister, who served as secretary for the Davenport, Iowa, board of education for 25 years, has retired. John Baumgartner is the acting secretary.

—Willard, O. Construction work will shortly begin on the new high school building which has been held up for some time pending the disposition of the case by the courts. Suit had been brought to compel an injunction against a bond issue of $175,000 for a building but the court in each case was favorable to the bond issue.

—Wellston, O. The new high school building was occupied for the first time on March 20th. The building, which has three floors, is of fireproof construction, and insures rapid and safe exit from the structure at any time. The ground floor, which is slightly below the street level, contains the entrance to the auditorium, boys' toilet rooms, shower baths and other conveniences. There is also a room for agriculture, two domestic science rooms, a manual training shop, an unassigned room and the heating plant. The second floor contains the offices, library, study hall, and laboratories. The third floor has a number of classrooms, a study hall, toilets and rest rooms. The entire building is piped for a vacuum cleaning equipment. The floors are of cement, covered with a special prepared dust-proof paint, and the interior finish is hard pine, stained in walnut.

—On February 25th the citizens of Meridian, Miss., approved a bond issue of $500,000. The bonds will be used for the erection of a junior high school to cost $250,000; an elementary school to cost $50,000, and the balance for repairs and additions to the school plant.

At the same election, the citizens voted to raise the school tax levy from seven and one-half to eight and one-half mills.



"Start Now to Escape the Summer Rush."

"Tommy Spence was "left back"—

AN earnest little fellow, too! He tried hard but he just couldn't make the grade.

But Tommy had trouble with his eyes—and his desk was off in the far corner of the room. His teacher didn't know that he didn't get enough light and fresh air. Nobody knew, not even Tommy.

How often little Tommy Spences are handicapped by window shades that do not permit proper light and fresh air to enter. And remember, beside detracting from his enthusiasm, education and health, every Tommy Spence in your school, **costs your community additional money,** for his progress is slower.

This summer—while the classrooms are empty, equip the windows with Hartshorn window shades mounted on Hartshorn rollers with double brackets. Make sure that Tommy Spence will be promoted next term.

Far-sighted school boards favor Hartshorn window equipment because it makes perfect ventilation and lighting possible.

Distributed by converters throughout the entire country.

Write for colors sage, linen, putty, dust, dill and in Tinted Cambric specially adapted for school use. They have been approved by competent chemists.

School boards of many municipalities have adopted this scientific control of light.

Hartshorn SHADE PRODUCTS

Established 1860

ROLLERS — SHADE FABRICS

STEWART HARTSHORN CO., 250 FIFTH AVE., NEW YORK CITY

Ed. Glidden, Baltimore, Md., Architect. Henry Adams, Baltimore, Md., Engineer. Geo. Woodward, Jr., Philadelphia, Pa., Electrical Contractors.

Holtzer-Cabot

Fire Alarm and Signal Systems for Schools

What could be more of a monument to a manufacturer than to have his product specified as a protection for a city's public school building?

School No. 65 at Baltimore, Md., is a splendid example of a modern school building and adds another great school to the big list of public buildings already protected by Holtzer-Cabot Fire Alarm and Signal Systems.

This is why more and more architects and engineers are specifying Holtzer-Cabot Systems exclusively.

Architects, Engineers and Members of Building Boards are invited to write for brochure "Signal Systems for Schools."

The Holtzer-Cabot Electric Co.

Home Office and Factory

125 AMORY ST. BOSTON, MASS.

BRANCH OFFICES

Chicago, Ill., 6161-65 South State St.
New York, N. Y., 101 Park Ave.
Baltimore, Md., 1104 Union Trust Bldg.
Minneapolis, Minn., 627 Metropolitan Life Bldg.
Cleveland, Ohio, 517 Union Bldg.
Philadelphia, Pa., 805 Otis Bldg.
Detroit, Mich., 1051 Book Bldg.
Pittsburgh, Pa., 9 Wood St.

HOLOPHANE CO.

ILLUMINATION SERVICE

TO HELP school officials bring about better lighting conditions the Holophane Engineering Department, which for over 25 years has been recognized as headquarters of the science of light control, has published a book called "Modern School Lighting." A copy will be sent you without obligation. Or one of our engineers will gladly call and discuss your lighting problems. There is no charge for this service.

HOLOPHANE GLASS CO.

Dept. A.S.5, 342 Madison Ave., New York

Works: Newark, Ohio.

In Canada: Holophane Co., Ltd., 146 King Street W., Toronto.

Holophane R-r, totally enclosing luminaire, ideal for school illumination. Furnished in sizes from 75 to 500 watts, in one piece type or with removable bottom plate. Also supplied with complete fixture of either ceiling (C) or suspension (S) type.

PERSONAL NEWS OF SUPERINTENDENTS

DOUGHTON GOES TO MANSFIELD

Isaac Doughton, superintendent of schools at Phoenixville, Pa., has announced his retirement at the end of the school year to become head of the department of education at the Mansfield (Pa.) Normal School.

Mr. Doughton is serving his eighteenth year as head of the schools, the community being the first and only one in which he has worked since graduation from Harvard in 1906. For four years he was a teacher in the high school, followed by three years as principal, and for the past eleven years filling the position of superintendent.

PERSONAL NEWS OF SUPERINTENDENTS

—Mr. M. L. Peters, formerly principal of the high school at Phoenixville, Pa., has been elected superintendent of schools to succeed Mr. Doughton who goes to Mansfield.

—Supt. C. C. Bishop of Oshkosh, Wis., has been reelected for the next three years at an increase in salary.

—Mr. Joseph Moran has been elected superintendent of schools at Bridgeport, Pa., to succeed H. E. James resigned.

—Mr. E. E. Hanson of Cooperstown, N. D., has been elected superintendent of schools at Albert Lea, Minn., to succeed C. W. Brown.

—Supt. H. E. Milligan of Ansonia, O., has been reelected for a three-year term.

—Supt. C. K. Hayes of Muscatine, Ia., has been reelected.

—Supt. H. W. Hartman of Onawa, Ia., has been reelected for the fifth time.

—Supt. Thomas A. Mott of Seymour, Ind., has announced his resignation to take effect on August first.

—State Supt. Josephine C. Preston of Washington has announced her candidacy to succeed herself in the office of superintendent.

—Supt. George Fields of Toppenish, Wash., has been reelected for another two-year term.

—Supt. W. B. Smith of Clarkston, Wash., has been reelected by unanimous vote of the board.

—When it became known that a New England city sought the services of L. P. Benezet, superintendent of the Evansville, Ind., schools, the citizenship of the latter community awakened to the fact that he was "one of the ablest school heads in the middle west," and urged that he remain.

—Mr. Wooden, of Ypsilanti, Mich., has been elected superintendent of schools at Butler, Ind.

—Supt. Lee of Belle Plaine, Ia., has been reelected for the next year.

—Supt. W. J. Caplinger of Maysville, Ky., has announced his resignation, effective at the close of the school year.

—Mrs. Cornelia C. Hodges has been reelected superintendent of schools of the Horn Consolidated District, near Oakville, Ia.

—Supt. Mahoney of Pacific Junction, Ia., has been reelected at an increased salary.

—Supt. Durkee of Corning, Ia., has been reelected for a two-year term.

—Mr. Charles R. Johnson of Otsego, Mich., has accepted a position as head of the schools of Clawson, near Detroit.

—Mr. Roy L. White has been elected superintendent of schools at Santa Fe, N. Mex.

—Supt. Fred Kuntz of DeWitt, Ia., has been reelected for the next year.

—Mr. W. F. Doughty has been elected superintendent of schools at Hillsboro, Tex., to succeed W. T. Lofland.

—Supt. W. V. Harrison of Frost, Tex., has been reelected for the ensuing year.

—Supt. M. H. Fly of Strawn, Tex., has been reelected for the next year.

—Mr. H. D. Neff has been elected superintendent of schools at Haskell, Tex., to succeed M. H. Brasher.

—Mr. T. P. Walker has been unanimously reelected superintendent of schools at Honey Grove, Texas, to succeed Supt. L. F. Connell who resigned Jan. 1, 1924, and is now teaching in the North Texas State Teachers' College at Denton, Texas.

—C. J. Martin of Pekin was elected president of the Central division of the Illinois State Association.

—At the convention of the Urban School Trustees' Association of Ontario, F. B. Edmunds was succeeded to the presidency by A. M. Cunningham of Hamilton.

—V. J. Duncan and A. J. Roberts were reelected members of the Ottawa, Ill., board of education. The local press extends the highest praise for their past services.

—Mr. P. A. Wright of Prosser, Wash., has been elected superintendent of schools at Snohomish.

—Mr. J. W. Tyler has been elected superintendent of schools at LaPlatta, Mo.

—Mr. F. E. Ranck of Tullahoma, Tenn., has been reelected head of the school system for another year.

—Mr. Leslie A. Butler of Ann Arbor, Mich., has been elected superintendent of schools at Grand Rapids, to succeed W. A. Greeson.

—Supt. K. D. Miller of Fort Dodge, Ia., has been reelected at a salary of $4,600.

—Supt. B. C. Berg of Newton, Ia., has been reelected for a third term.

—Supt. G. M. Sims of Port Arthur, Tex., has been reelected for another two-year term.

—Supt. E. F. King of Colorado, Tex., has been reelected for the year 1924-1925.

—Supt. O. A. Fleming of Freeport, Tex., has been reelected for the next year.

—Supt. John Milne of Albuquerque, N. Mex., has been reelected for another two-year term at a salary of $5,000 per year. Supt. Milne has completed thirteen years as head of the local school system.

—Mr. H. J. Kaake has been elected superintendent of schools at Mancelona, Mich.

—Mr. Murray Martin has been elected superintendent of schools at Eaton Rapids, Mich., to succeed Mr. E. H. Moore.

—Supt. I. O. Hubbard of Ashland, Wis., has been reelected for the next year.

—Mr. B. H. McLain of McKinney, Tex., has been elected superintendent of schools at Sweetwater.

—Mr. E. G. Lange of Waupaca, Wis., has accepted the superintendency at Delavan, Wis.

—Supt. L. B. McGuffin of Yoakum, Tex., has been reelected for the ensuing two years.

—Supt. L. H. Petit of Chanute, Kans., has been reelected for a two-year term, at a salary of $4,000 per year.

—Supt. J. R. Barton of Sapulpa, Okla., has been elected for a three-year term, to succeed H. B. Bruner.

—Mr. N. R. Crozier has been elected superintendent of schools at Dallas, Tex., succeeding J. E. Kimball resigned.

—Supt. E. H. Smith of Bethel, Mo., has been reelected for another year.

—Supt. D. E. Wiedman of Bellingham, Wash., has been reelected at a salary of $4,000 per year.

—Supt. W. M. Kern of Walla Walla, Wash., has been reelected for another year.

—Supt. H. E. Smith of Oconto, Wis., has been reelected for a three-year term.

—Supt. F. M. Longanecker of Racine, Wis., has been reelected for a three-year term at the same salary.

—Mr. Oscar Haney has resigned as superintendent of schools at Kentland, Ind.

—Mr. A. M. Nelson of Auburn, Neb., has been elected superintendent of schools at Fairbury.

—Mr. C. W. Brown of Albert Lea, Minn., has announced his resignation to take effect at the end of the present school year.

—Supt. Harry Hoegh of Bertha, Minn., has been reelected for another year at a salary of $2,400.

—Mr. O. C. Kerney has been elected superintendent of schools at Newcastle, Wyo.

—Supt. M. E. Pearson of Kansas City, Kans., has been reelected for a two-year term. Mr. Pearson has been head of the Kansas City schools for the past 22 years.

—Supt. E. R. Beumer of Kirkwood, Mo., has announced his resignation, effective with the close of the present year.

—Mr. P. L. Hawver of Cerro Gordo, Ill., has accepted a position at Chicago.

—Supt. W. O. Moore of Upper Sandusky, O., has been reelected for a two-year term.

—Mr. J. W. Browning of Washburn, Wis., has been elected superintendent of schools at Rhinelander, at a salary of $3,500.

—Mr. L. S. Devoe has been elected superintendent of schools at Nelson, Neb.

—Supt. Frank K. Watson of Danbury, Conn., has been relected at a salary of $5,500.

—Supt. Henry G. Ellis of Petersburg, Va., has been granted a six weeks' leave of absence in order that he may regain his health.

—Mr. I. T. Gilmer has been elected superintendent of schools at Graham, Tex., to succeed H. B. Cogdell.

—Supt. E. V. Bowens of Galion, O., has announced his resignation, to take effect at the close of the present school year.

—Supt. S. S. Nisbet of Fremont, Mich., has been reelected for another year.

—Dr. Charles S. Chapin, principal of the state normal school at Montclair, N. J., died on March 22nd, at Atlantic City, after a serious illness resulting from

grip infection. Dr. Chapin who was 65 years old became principal of the Normal School in 1907.

—Supt. R. E. Gowans of Ottawa, Kans., has been reelected for his eighteenth term, at the same salary.

—Supt. Sebastian Lake of Sac City, Ia., has been reelected for the ensuing year.

—Benjamin J. Burris, state superintendent of schools for Indiana, has been elected president of the eastern division of the Indiana Normal School at Muncie.

—Supt. C. W. Crandell of Cadillac, Mich., has been reelected for another two-year term at an increased salary.

—Supt. W. G. Robinson of Selmer, Tenn., has been reelected for the ensuing year.

—J. O. Engleman, former superintendent and more recently field secretary of the National Education Association, has been elected superintendent of schools at Terre Haute, Ind. Mr. Engleman assumes his new office on August first.

—Supt. C. C. Roeder of Jourdanton, Tex., has been reelected for the next two years.

—Francis G. Blair, state superintendent of public instruction for Illinois, has been named chairman of the school division for Illinois of the Thomas Jefferson Memorial Foundation. Mr. Blair's work will be the enlisting of the support of pupils and teachers of his state in the movement to establish Monticello as a permanent memorial, accessible to the public.

AMONG SUPERINTENDENTS

—"The captain of his soul! How easy for the superintendent to say! How difficult to be! Like the straight and narrow path that leadeth into life, how few there be that find it!" So writes Dr. John L. Tildsley in an appreciation of Clarence E. Meleney, who retires as associate superintendent of the New York City schools this year. "And through many years he has run true to form, the same youthful enthusiast for new ideas and the same believer in the true and tried."

—Dr. Martin G. Brumbaugh, former superintendent of the Philadelphia schools and governor of Pennsylvania has accepted the position of professor of education at Bates College, Maine.

—Superintendent C. M. Negus of Greybull, Wyoming, has become a strong factor in the health movement of the state. He presided at a recent meeting of the Wyoming Public Health Association and delivered an instructive address on "The Nurse in the Educational Field."

—Oklahoma:—A. J. Lovett has been reelected superintendent at Blackwell for three years; R. Lee Snyder reelected superintendent at Nowata; A. B. Herring has been reelected superintendent of the Wynnewood schools for the twelfth consecutive time; Superintendent J. E. Boggett has been reelected at Sayre.

—Superintendent H. B. Wilson of Berkeley, California, was elected superintendent of the Houston, Texas, schools at a salary of $8,500, but Mr. Wilson has declined to accept.

—Dr. Clarence E. Meleney, associate superintendent of the New York City schools will retire at the end of this year, owing to the fact that he has reached the age of seventy. He has served New York City as an educator for 27 years.

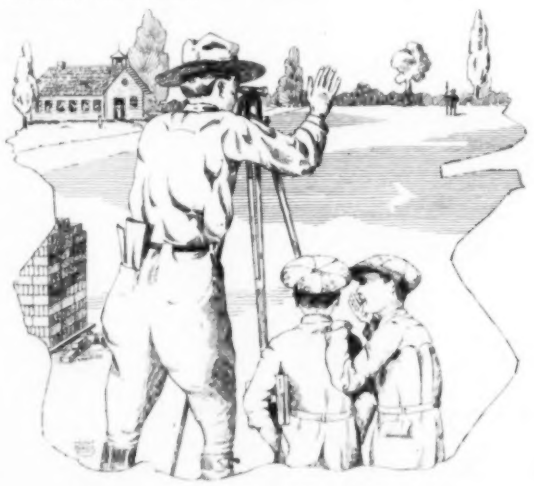
—Darrell Joyce, superintendent of the Hamilton, Ohio, schools, summarizes the superintendent's job in the following: "In general, given scholarship, executive ability, financial judgment, optimism, faith, honesty, unlimited patience, knowledge of human nature and a genuine spirit of service there is a chance for a superintendent to make good."

—S. J. Gier has resigned the superintendency of the Hillsdale, Michigan, schools. He has been active in the teaching profession for thirty-seven years.

—"There seems to be a well nigh universal demand for the reelection of William L. Ettinger as superintendent of the New York City schools," says the bulletin of the Public Education Association, "inspired by the recognition of the courageous and enlightened way in which he has administered the schools. What evidence could be more conclusive than this that the best interests of the school system and of the community would be served by retaining Dr. Ettinger? For the primary task of a superintendent of schools is threefold: to lead his staff wisely and enthusiastically, to make the schools administer to the needs of the children, and to win the enlightened support of the community in the furtherance of his program. In all these respects Dr. Ettinger has made his mark."

—Supt. David E. Cloyd of Hurton, S. D., has recently been reelected for another term of three years, at the same salary. Supt. Cloyd has just completed a four-year term as head of the school system. Since Mr. Cloyd came to the superintendency, many modifications and improvements have been made in the schools, and the general educational spirit and tone have been appreciably improved. A constructive school program has been promoted, the staff of teachers and principals has made continuous growth and advancement, and the general work of the community has been stimulated.

—Mr. Arthur E. Lindborg, of St. Croix, has been appointed director of education for the Virgin Islands of the United States, succeeding Mr. Daniel R. Nase. Mr. Nase has become principal of the high school at Arecibo, Porto Rico.



—Supt. Ira H. McIntire of Green Bay, Wis., has been reelected for a three-year term.

—Supt. Prentiss Brown of Baker, Ida., will resign at the close of the school year.

—Mr. M. M. Van Patten has been elected superintendent of schools at Buhl, Ida., for the next year.

—Mr. W. F. Doughty has been elected superintendent of schools at Hillsboro, Tex., to succeed W. T. Lofland.

—Charles F. Miller of Goshen, superintendent of Elkhart county for three years, and formerly of Nappanee where he was superintendent for sixteen years, has announced his candidacy for the state superintendency of the Indiana schools.

—The New York City board of education has appointed the following new school principals. Eugene A. Collegan, principal of Boys' High School; John M. Avent, principal of Curtis High School and Elias Lieberman, principal of Thomas Jefferson High School.

—Peter A. Mortenson, former Chicago superintendent of schools, has gone into the life insurance business. "Insurance has reached a lofty place of education in the care of one's families, health and sanitation, and this field is but the continuation of elementary, high and college courses," he said. "In school life, from the educator's point of view, I was engaged in leading an army who were underwriting the education of children. I am continuing that work by striving to educate their fathers to underwrite the ambitions of their life."

—Mrs. Josephine Preston, state superintendent of Washington, is being criticized by the press of that state for sanctioning an essay among the pupils on the question of public utilities privately owned.

—Mr. E. H. Drehonor of Mt. Pleasant, Mich., has been elected superintendent of schools at Stanton, to succeed W. V. Horn.

—Supt. J. J. Hendricks of Kerens, Tex., has been reelected for a two-year term.

—Supt. F. L. Mahannah of Cedar Falls, Ia., has been reelected for a two-year term.

—Supt. C. F. Garrett of Fairfield, Ia., has been reelected for a sixth term.

—Mr. Charles C. Krauskopf has been elected district superintendent of schools at Chicago, Ill., to succeed the late Mr. Long. Mr. Krauskopf is a graduate of the University of Indiana and has been connected with the Chicago schools since 1899.

NEWS OF SCHOOL OFFICIALS

—Mr. Lewis Weaver has been reappointed chief engineer of the board at Kansas City, Kans. Messrs. Rose & Peterson have been appointed as architects for all building amounting to more than $50,000.

—Mr. John R. King, former member of the board of education at Detroit, Mich., died on March 9th, at the age of 73. Mr. King was secretary of the board from 1884 to 1892.

ASSOCIATION ELECTIONS

—William J. Bickett, superintendent of schools at Trenton was elected president of the New Jersey state council of education. The other officers elected are: Vice-president, Harry A. Sprague, superintendent of schools, Summit; secretary, J. Howard Hulsart of Dover, superintendent of schools, Morris County, and treasurer, Edward V. Walton, superintendent of schools, Roselle.

Flexible Anchorage System for School Shops

Installation in the Manual Training Department of the Passaic Memorial School

J. H. Constantine, Director of Industrial Education, Passaic, N. J.

During the years in which the writer has been engaged in both engineering construction and vocational education work in schools, the need for some standard form of reliable anchorage in ceilings, floors, and side walls for the purpose of fastening motors, line shafting hangers, machinery, piping, etc., has been constantly brought before him.

Modern school buildings as well as industrial buildings differ greatly in form of construction. In recent years, however, the trend of modern engineering practice is to provide a fully fireproof structure. This means a reinforced concrete building or steel frame with reinforced concrete slabs and concrete fireproofing on steel members.

In school buildings it is usually a difficult problem in the machine shop, laboratories and gymnasium to find a secure and flexible anchorage for apparatus.

The spotting of individual inserts set flush with the ceiling and embedded in concrete floor slabs was the first step to relieve this condition. They are not, however, entirely dependable in carrying capacity and never seem to be placed in the right place. This means some kind of bridging on the ceiling in order to get the anchorage and flexibility necessary.

When existing equipment or transmission lines must be changed, considerable labor, careful measurements, bridging and drilling is necessary where no inserts are provided or where individual inserts are used.

These difficulties have been greatly relieved if not entirely eliminated in recent years by the use of the long continuous box rail insert (Fig. 1 shows one type of these inserts in cross section).

These long inserts running continuously in parallel rows over the entire ceiling, make it possible to secure the required anchorage at any point desired, usually without any bridging. These inserts are heavy rolled sections and are designed to take any load within practical requirements.

It is a source of pleasure as well as a great convenience to know that whenever the necessity arises for installing additional equipment; rearranging existing machinery, and relocating motors these changes can be made quickly without any additional material (and usually without the aid of expert millwrights). This is also true in reference to the placing of line shafting or counter-shafting. Box rail inserts of this kind should be incorporated in the building design, especially in manual training departments for "safety first" sake as well as the economy and convenience they afford. (Figs. 2 and 3 illustrates some of their uses.)

Figure 4 illustrates the method of installation used in the Passaic Memorial School. This

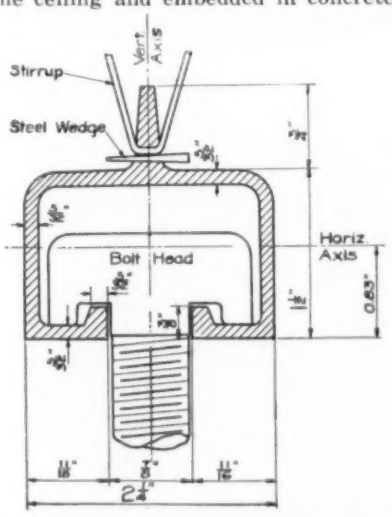


FIG. 1. CROSS SECTION OF BOX RAIL INSERT.

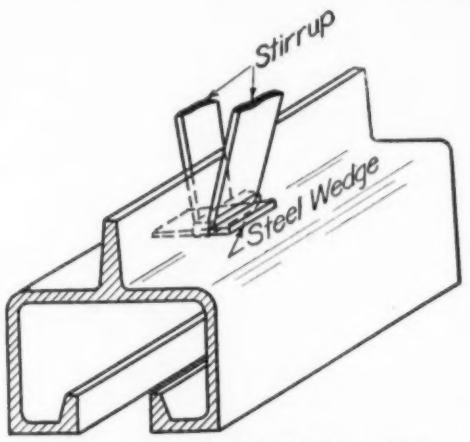


FIG. 1A. DETAIL OF BOX RAIL INSERT.

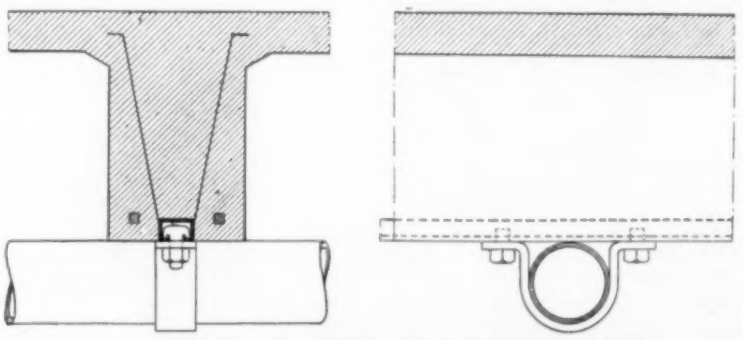


FIG. 2. BOX RAIL INSERT USED AS PIPE HANGER.

cut shows a corner of the manual training department. The long continuous inserts were set flush with ceiling and run in parallel lines about 7′ 0″ center to center from wall to wall. Since this school is in course of construction, the photograph was taken after the scratch coat of plaster had been applied. The rails were embedded in the reinforced concrete floor slab, which is of the Republic long span flat slab de-

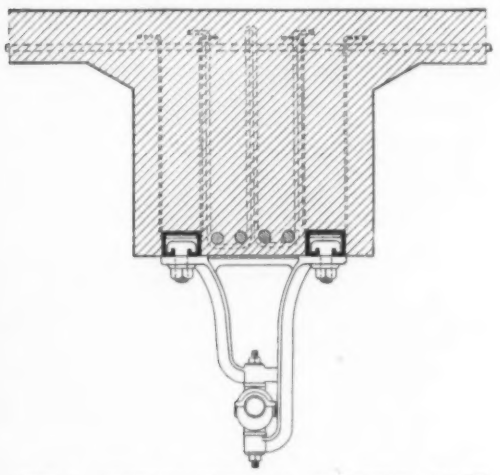


FIG. 3. INSERTS USED FOR CARRYING SHAFT HANGER.

sign. The box rail acts as a reinforcing bar as well as a long continuous insert. This point may be economically utilized by designers and engineers, and the initial cost of box rails thereby reduced.

For installation or changing of equipment, a flat or monkey wrench and six foot rule are the only tools necessary. Lining up and adjusting of overhead line shafting can be carried out quickly and with little labor cost. Where heavy castings have to be handled an I Beam can be clipped to box rails or hook bolt used for a chain hoist.

The long continuous box rail is a great advance in anchorage practice, not only for manual training departments in schools but in practically all departments of industrial plants.

SCHOOLHOUSE DEDICATIONS

—The new Emerson school at Ionia, Michigan, was opened with appropriate ceremonies. President J. Clyde Watt was in charge. The high school orchestra provided the music. President Watt outlined the history of the building project. Other speakers were the mayor and prominent clergymen of the city. A flag presentation closed the program.

—The new Emerson elementary school at Ionia, Mich., was opened with a formal program. President J. Clyde Watt of the board of education delivered the address of welcome followed by an address by Mayor F. W. Green and others. A few days later the new Jefferson school was opened with an address by W. L. Coffee, deputy state superintendent of public instruction. The members of the board of education are J. Clyde Watt, Roy E. Curtis, Dr. R. L. Benedict, Lewis H. Hale and Mrs. Gertrude A. Page. A. A. Pother is the superintendent. Miss Erma Beckwith is the principal of the new Emerson school and Miss Lucy Cull is at the head of the new Jefferson school.

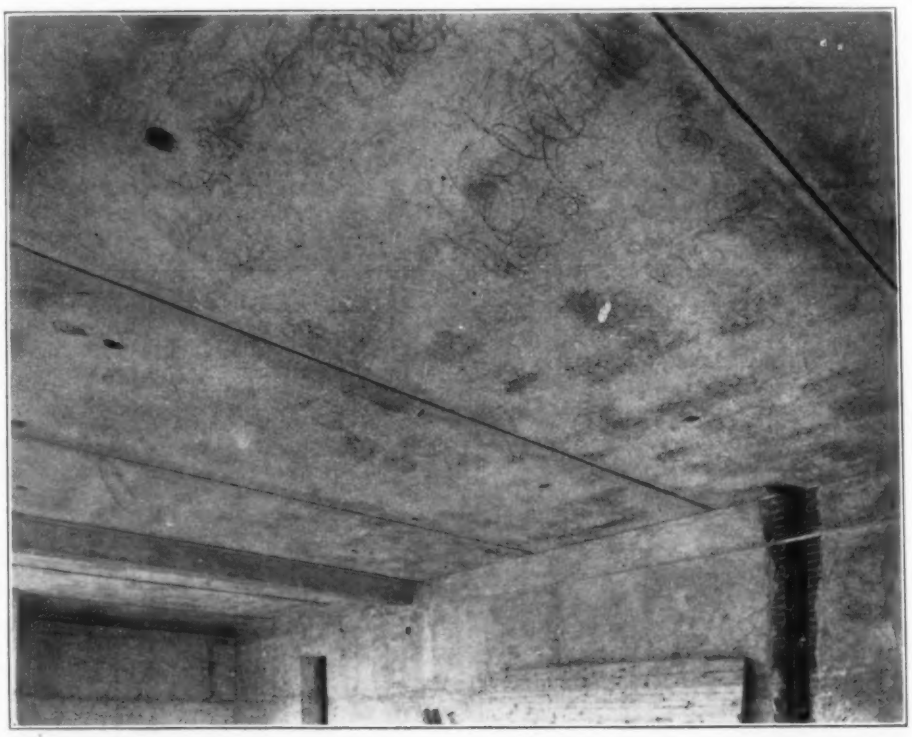


FIG. 4. CEILING OF SHOP IN THE PASSAIC MEMORIAL SCHOOL, SHOWING INSERTS FLUSH WITH PLASTER.

TEACHERS AND ADMINISTRATION

—Five changes in the rules governing teacher training in Indiana have been adopted by the state board of education. The changes which were adopted by the board at the suggestion of the state teachers' subcommittee are as follows:

1. While two subject groups are still required, a teacher desiring to specialize may do so.
2. The number of semester hours which a teacher is required to attend classes when a student of science is increased by from 20 to 50 per cent.
3. The amount of educational work for teachers is reduced slightly, thereby allowing an increase in academic work.
4. Teachers who have taught three years will be granted a second grade license and after two more years of teaching will be granted a first grade license. (The law formerly provided that a teacher must have at least five years of teaching before she was granted a first grade license.)
5. Increased the amount of work in music and arts from ten to twenty hours.

—The school board of Somervilie, Mass., has defeated a proposal providing for a flat increase of $100 in salary to all instructors.

—Under a rule of the school board at Jonesboro, Ark., all teachers on the teaching staff for three years and performing satisfactory service, are rated as permanent members of the staff. The permanent listing of the teacher's name means that the teacher is dependable and can be retained indefinitely without the formality of an annual endorsement. The salary and assignment of such teachers are subject to change but the tenure is permanent so long as the teacher remains competent. Teachers rated as permanent must give evidence of seeking professional improvement and of continuing to improve their classroom teaching.

Teachers rated as permanent may not be dismissed without due notice. In like manner they are expected to give the administrative officers sufficient notice in case they desire to leave the system to go elsewhere. Failure to send such notice is taken to mean that the teacher is subject to reassignment for the ensuing year.

A special letter explaining the rules is regularly sent out by Superintendent J. O. Womack to teachers placed on the permanent list by action of the board.

—The Substitute Teachers Association of New York City through its president, Mrs. Emline M. Irre, has voiced its protest against married women teachers with husbands who are able to provide for them. According to Mrs. Irre, there are married teachers in the system getting $40 a week who have husbands getting salaries of about $50 a week and who also hold night positions teaching English to foreigners whereby they get another $20 a week, making their salary approximately $110, while substitutes who are by no means less prepared to teach the evening schools go starving, as there are no available vacancies for these teachers. At least, she adds, they do not know of them as there is no means provided for the substitutes and schools to get in touch with one another.

—Among the questions to teachers under a self-improvement plan submitted by Supt. R. W. Fairchild, Elgin, Ill., and Assistant Supt. Miss Mae T. Kilcullen the following are embodied: "Am I neat in dress and care of person? Am I inclined towards the extreme and immodest in dress? Am I courteous? Do I enunciate clearly? Do I get enough rest? Do I prepare my questions? Do I play favorites? Do I have a clear cut idea of the purpose of my lesson?

—Through the board of education three hundred pupils secured the reinstatement of Miss Nancy Muter who had been dismissed by the superintendent of the Atlantic City, N. J., schools.

TEACHERS' SALARIES

—Middletown, Conn. Under a new rule of the board, an extra maximum salary has been provided for teachers who have received the maximum salary for at least one year. The extra salary applies to grade and high school teachers, both male and female, and is given at the rate of $50 a year on condition that the teacher attends a complete session of an approved summer school and presents evidence of having completed the work satisfactorily. Until further action, a teacher may have his or her salary increased in this manner $100 beyond the above mentioned maximum salaries.

It is also provided that a payment of $50 shall be made in ten monthly installments of $5 each to any teacher who may attend the sessions of the National Education Association and who shall take a four weeks' course in an approved summer school. Such teacher must present evidence of having attended the convention and of having performed satisfactorily the work in the summer school.

—The teachers of Cincinnati are considering the question of group insurance.

—Paterson, N. J. The committee on education of the board has approved a new salary schedule providing for the following salaries:

First year, $1,400; second year, $1,500; third year, $1,600; fourth year, $1,700; fifth year, $1,800; sixth year, $1,900; seventh year, $2,000; eighth year, $2,100; ninth year, $2,300; tenth year, $2,500; eleventh year, $2,700; twelfth year, $2,900; thirteenth year, $3,000.

—The school board of Schenectady, N. Y., has decided against the retention of the teachers' rating system. Future increases in salary are to be apportioned under the law providing increases of not less than $75 annually. The elimination of the merit system is said to meet the approval of 75 per cent of the teaching force.

—High school teachers in Newark, N. J., receive the highest salaries paid for regular teachers, according to a recent bulletin of the U. S. Bureau of Education. Newark teachers begin at a salary of $2,100 and advance to $4,400 by annual increases. In general the great cities offer the best salaries but their highest entrance salary, $1,500 is matched in some of the smaller places such as San Jose, Richmond and Piedmont, Calif. The amount most often paid to beginning teachers is $1,000. The circular reports the salaries for teachers in elementary, junior high, and high schools in nearly all cities of more than 2,500 population.

—The court has recently rendered a decision in favor of the school board of Lake Bluff, Ill., in a suit brought by D. R. Mitchell, a teacher, to recover a year's salary. It was alleged that the board did not permit the teacher to carry out his contract because he was not licensed.

—Newark, N. J. Salary increases have recently been granted to teachers, giving $100 to elementary teachers, $125 to women high school teachers, and $150 to men teachers.

ECONOMIES IN SCHOOL BUILDING CONSTRUCTION.

(Concluded from Page 61)

rooms to total area, the days of the advertising school architect, who does business on a boast of everything but amount of available classrooms or usable space, should be numbered. Per pupil cost of building is an item that if published would tend to decrease extravagance in construction and increase space utility.

"In certain buildings there has been much money spent on expensive showers for girls and elaborate dressing and locker rooms which are seldom used. The question of the use of such facilities should be determined before the equipment is installed."

The Problem of Toilets

The report makes an indictment against the state code in its provisions on toilets in schoolhouses. The code provides one toilet for each 25 boys and one toilet for each 15 girls. The committee found to its surprise that there was but a slight variation in the use of girls' toilets over boys' toilets. The committee, after reporting its findings on several schools, says:

"Combining these reports in terms of maximum accommodations for a school of 1,200 equally divided between boys and girls, it would mean that there should be provided ten toilets for boys and twelve for girls, or a total of 22 toilets, and if based on average accommodations, there should be provided six toilets for boys and seven for girls, or a total of thirteen.

"While if the state code were complied with there should be provided 24 toilets for boys and 40 for the girls, a total of 64. This means that the state code requires 140 per cent more toilets for boys than the maximum use shows, and 233 1/3 per cent more for girls than the maximum use shows, and 300 per cent in excess of average needs for boys and 471 per cent in excess of average needs for girls.

"A check-up on a large number of elementary schools by the architectural department of the Cleveland schools shows that, at the maximum use one toilet for each 30 girls and one toilet for each 50 boys and one urinal for each 30 boys would be more than ample and that, by a little organization in the use of these accommodations, the number of children could be greatly increased.

"These figures the committee feels are significant because this is probably the first real study which has been made of toilet accommodations in the schools of the state or so far as we are able to discover in the country. It shows a chance for a considerable saving in the cost of plumbing and fixtures for school toilets as well as a saving in floor space used in toilet rooms."

Discards Fireproof Doors

The recommendations made by the committee contain the following: "That no fireproof doors shall be required in the corridors and stairways of fireproof buildings, except where the heating plant is in the basement, there may be fireproof doors between the basement and the first floor; where the heating plant is outside of the school building there may be fire doors in connecting passage ways between the heating plant and the school building, the purpose in both cases being that the doors act as smoke screens.

"That it be made permissible under the law to experiment with cheaper methods of ventilation consistent with conservation of health with the hope that not only a cheaper system but a more satisfactory system may be evolved.

"That the present regulations regarding toilets be revised to provide that not more than one toilet shall be required in elementary schools for each 30 girls and one toilet for each 50 boys, and not more than one urinal shall be required for each 30 boys. While in senior and junior high schools not more than one toilet shall be required for each 40 girls and one toilet and one urinal for each 45 boys.

"That we call upon school architects throughout the state or non-resident architects to apply the same business methods to the planning of school buildings as are now demanded of architects of office buildings, hotels and factories that they produce the maximum ratio of classroom or usable space to the cubical contents of the building, since up to the present time there has been generally a wanton waste of space in school building construction.

"That we recommend for industrial departments of senior and junior high schools a shop construction of steel and brick which would furnish adequate accommodations at greatly reduced cubical cost.

"That in planning buildings architects be required to furnish a per pupil cost of buildings already built as a guarantee of economical construction under their plans. That boards of education in employing architects consider along with other qualifications the ability to produce efficient buildings with the minimum of subsidiary contracts."

—The Easton, Pa., board of education has submitted the plans and specifications for its new senior high school to Dr. N. L. Engelhardt for criticism and report.

—By annexation of eight school districts the school population of Norfolk, Va., has been increased by over 3,000 making a total of 24,000 pupils. The school board has spent several millions in the last five years for new schools. Whether in the face of the retrenchment policies any new building projects will be undertaken in 1924 is not determined.

—School children of the state of Ohio were given an opportunity in February, to contribute toward a fund, for the restoration and preservation of the site of the first settlement at Schoenbrunn, in Tuscarawas County. The legislature has appropriated $10,000 toward the preservation fund and the contributions of the school children will complete the fund.

SCHOOL BUILDING EVOLUTION IN GEORGIA.

(Continued from Page 52)

Neither does the law requiring architects to register prevent certain contractors from furnishing plans under the title of "designer." Such contractors usually offer to furnish free plans provided the situation is manipulated so as to give them the contract for erecting the building. One of the most valuable functions of the right sort of architect is to check up on the contractor to see to it that the plans and specifications are carried out to the greatest advantage of the owner, and it is clearly evident that there could be no such control when the contractor is his own architect. The highest order of contractors prefer to work under the supervision of the real architect, knowing that such an honest and businesslike course is the safest for all concerned.

Cooperating Parties and Order of Procedure

From the very beginning, therefore, the following parties should cooperate:

1. The county board of education, the local board of trustees, the local superintendent and teachers, the regular state school supervisors—all to represent the general and particular needs and interests of the school as a part of a well planned county unit system of consolidated schools.

2. The building supervisor of the state department of education, to represent building standards applied to local needs.

3. The architect, to represent the practical development of the building from the plan to the completed structure.

With the foregoing parties always working in cooperation, the following should be the approximate order of procedure:

1. To select the most suitable site for the particular school under consideration from standpoints of accessibility, environment, drainage, soil, size, shape.

2. To decide upon the type and arrangement of plan that will best conform to the topography of the lot and to the curriculum and enrollment of the school, and to determine in a general way upon those features that affect the durability and appearance of a building—materials, workmanship, design, etc.—in order to estimate in an approximate way the probable cost of the building, including an adequate minimum equipment, with a view to deciding upon the amount of the bond issue. If the cost runs high in relation to the full amount that could legally be voted, to make such modifications in the plans as will tend to reduce the cost without affecting those standards that are essential to correct school buildings.

3. To proceed in the proper way to call a bond election for the purpose of building and equipping a schoolhouse according to the plans and specifications. Great care should be taken by those promoting the matter to have every step taken in an absolutely legal way, and to arouse community interest in the matter to carry the election for bonds as unanimously as possible. In this connection it would be well for the architect to make an attractive drawing of the floor plan and a perspective view of the building, and to post it in some public place.

4. When the bond election shall have been carried, to have the architect to complete the working drawings and specifications. At every stage he should submit these to the building supervisor of the state department of education for criticisms and suggestions. The final approval of the building supervisor, representing the state department of education, must be hand-written on the completed blue prints and specifications.

5. To advertise for bids in the usual way, and to proceed with the letting of the contract on a safe and conservative basis according to the regulations of the American Institute of Architects. At the time of the letting of the contract, the building supervisor of the state department of education should be present for consultation to prevent any mistakes from being made, should any further modifications in the plans and specifications become necessary to lower the bids in order to keep within bounds of the appropriation for the building and equipment.

6. For the contractor to proceed with the erection of the building under the close supervision of the architect, the definite location on the site having been decided upon by all concerned. As the erection proceeds, if any of the cooperating parties, other than the architect, desire to make suggestions to the contractor, they must make them only through the architect, and any suggestions that the contractor may wish to make must be made directly to the architect. This course will prevent confusion, and will place the responsibility definitely on the architect. Absolutely no changes must ever be made in the plans and specifications at any stage without the agreement of the building supervisor of the state department of education.

A Practical Application

The school building at Barney in Brooks County, Georgia, is a practical application of the principles outlined in this paper. This building is now nearing completion, and will in all probability score correct from every standpoint. Already it is exerting its influence on future buildings in the state, a number of superintendents and boards of education having made visits to it to get into the spirit of the thing.

Primarily the splendid success of the Barney school building is due to the wise vision and idealism of the county superintendent of schools, Julian J. Sizemore, Quitman, Ga., in cooperation with one of the most earnest, sincere, and businesslike local school board of trustees in the state. These are Messrs. F. B. Walker, chairman; Ben. F. Long, secretary and treasurer; W. R. Blease; J. G. Scruggs, H. D. Jordan.

It would be a long story to tell of the development of this situation in detail, including the ideal cooperation of all the parties concerned: the local school authorities, the state department of education, the architect, and the contractor.

A MODEL SCIENCE BUILDING.

(Concluded from Page 58)

each lecture room and some of the laboratories are provided with the necessary accessories for that purpose. A dark room, adjoining the physics laboratory, and facilities for making lantern slides are also at hand.

To give this and the adjoining buildings a beautiful setting the landscape gardening section of the agricultural department planned the planting of lawns, shrubbery and trees to beautify the grounds.

The school now has an enrollment of 1,800, about half of whom have registered for a science. The faculty numbers 72, and its principal is H. A. Spindt. The junior college enrollment is 125 and its dean is Miss Grace Bird.

A SOUTH DAKOTA SCHOOL BUILDING.

(Concluded from Page 62)

room is used in part for study purposes and will accommodate 225 pupils for this purpose. The balance of the room provided with auditorium seats and includes a balcony which will accommodate altogether 650 persons. The stage has adjoining it several dressing rooms and there is a balcony equipped with a fireproof motion-picture booth.

The building was erected at a cost of $130,000 and was financed by means of a bond issue. The funds received for the bonds were placed on deposit in the local banks and approximately $2,500 was received from interest.

BUSY SUPERINTENDENTS

—Supt. W. C. Kunce, of Antwerp, O., with the assistance of his teachers, issues from time to time typewritten, mimeographed letters to the patrons of the schools. The letters are not issued at regular intervals but are sent out at opportune times in response to a distinct need, or in direct answer to questions of parents or school patrons.

In general, the letters contain items of school news relating to the work of the teachers and the superintendent. They point out reasons for changes or improvements, tell about things needed, and discuss a variety of matters in which patrons are interested and which will raise the esteem in which the members of the faculty or the schools are held. Local interest happenings and stories are not given a place in any of these communications of the superintendent. Mr. Kunce is thoroughly convinced that he has evolved a successful method of getting his school work before the parents and that his efforts have been productive of good results.

—A request that school children be encouraged on Arbor Day to plant Gold Star Memorial trees, a tree for every veteran in each district who gave his life in the World War, has been made by the World War Registrars, a national organization with headquarters at St. Louis. The city has established a court of honor consisting of 503 trees dedicated to the sons and daughters of the city who died in the service.

—The practice of celebrating Arbor Day in New York state schools by having a school plant a tree is rapidly giving place in rural districts to planting of a section of a school forest that at maturity will pay either in whole or in part the cost of maintaining the school and thereby relieve the burden upon the taxpayers. A number of rural schools in various parts of the state have started plantations and are adding to them each year. The first undertaking of this kind in New York state was in Constable, Franklin County, where the Pine School District started a ten-acre forest known as the Davenport Memorial Park.

—"One difficulty with the American schools of today is the lack of application of business principles. What manufacturer could do business if he bought all of his wool in September, carded it all on the fifteenth of November, on January second began to spin it, March third began to weave it and soon after vacation or the latter part of April began dyeing so that he could 'finish' it the latter part of May and sell all of it June nineteenth?" So asks Warren A. Hanson, superintendent of the New London, Conn., schools. "You say that this is absurd, but may I say that it is no more absurd than to insist that all children shall enter school on the fourteenth of September, that they shall all be equally prepared to begin a certain type of work on the fifteenth of November, that on February twelfth they shall have finished page forty-two of the spelling book, and that on April twenty-second they shall have completed the first fifteen problems on page 182 of the arithmetic. Yet if our teachers live up to the schedule as given in most school programs it means virtually such a course must be pursued by the children."

—Chicago, Ill. The elementary teachers' council of the board has adopted a resolution recommending that a uniform system of penmanship be established and that books for this purpose be furnished to the pupils. The change is intended to raise the standard of penmanship in the schools.

Architects Open New Offices

Childs & Smith, architects, of Chicago, Ill., have announced the opening of new offices in the Central Life Building, at 720 North Michigan Avenue.

Janitors' Salaries

—Milwaukee, Wis. The special committee on finance has recommended that the board, beginning with January, 1924, and until such time as a new schedule for janitor service is adopted, shall pay a bonus so that the net earning of each janitor need not fall below $200 per month. The bonus is to be based upon the statement of net earnings presented to the board in September.

THE SELECTION OF TEACHERS.

(Continued from Page 38)

to the service of future generations stay with the job about three years. Hence it is that we are confronted with approximately 125,000 vacancies each year in the teaching positions in our schools. The selection of these teachers is perhaps the most important single duty of a superintendent, and modern education has given him practically no definite standards of guidance.

From purely a personal viewpoint, superintendents would often "put themselves over" better if they would seriously swing their attention over to questions of personal employment and management. The corporation methods of selecting their higher employees offer as routine procedure the use of long-distance in calling up former employers of applicants; the personal interview; the try-out or probationary period of work, with abundant opportunity given to familiarize new men with their work; visits to working places of applicants, and observation of men actually at work; getting the whole record of an applicant, not the record of any part the applicant chooses to offer; all these points are seen to, and successful schoolmen will adapt them to their own practice. For many a famed superintendent has flown to the heights of success on the wings of his teachers, and many a poor superintendent has survived year after year, thanks to his single ability to pick winners for his teaching force.

The Problem of Assignment

The assignment of teachers selected demands the fullest interchange of ideas between principals and heads of departments and the superintendent; the superintendent whose mind is not ventilated by the currents of thought sweeping from time to time through his schools anent assignments of teachers to new work, transfers, promotions, etc., is shut off from the most vital workings of the spirit of his organization.

Proper selection of teachers goes half way toward solving the much-discussed question of tenure. A superintendent when he selects a teacher is not selecting for one year only but on an average for three or four years. Longer tenure after proper selection is the satisfactory slogan. The present competitive scrambling for jobs, if eliminated, could very easily be replaced by a worse state of affairs, so long as one-fourth of our teaching population is too young to vote. It is not easy to rid a system of an established teacher. She may have her ear on the ground while her scheming chief fondly imagines she is listening to heavenly music within her academic cloisters. She may have seen superintendents come and go until she is not much impressed by them.

Effective Procedure Summarized

Finally, then, what shall we say would be an effective procedure in selecting a faculty for a system next year? First, the employing officer will be the superintendent of his assistants. He will nominate, the board of education will elect. He will know as definitely as possible early in the year just what work will have to be done during the forthcoming year, and will make plans for personnel accordingly. He will have to figure on a substantial turnover in his teaching body, and should make his estimates on the calculated rate of replacement peculiar to his system. By early reelections, prompt distribution of blank contract forms, and insistence on early acceptance or rejection of positions offered, he will be enabled to calculate with some accuracy at least the number and kind of teachers he will need for the ensuing year. Meantime, however, he will visit neighboring schools, will keep a weather eye open at teachers' meetings of various sorts, will converse on the subject of teachers with other schoolmen, will visit normal schools and colleges when possible, and make himself acquainted with the training schools of these institutions. He will know the more promising seniors, and be on good terms with the placement officials of the schools which serve his system. When the time comes for getting in touch with prospective members of his new teaching force, he will be in a position to invite teachers he knows to be good risks, to apply for positions or accept his offers. He will in a normal situation have many applicants to choose from, and many of these will be of poor or impossible material. He will insist upon personal interviews with unknown teachers in every case possible. He will communicate confidentially with former employers of prospective teachers. He will see that teachers meet the legal or accepted requirements for admission to his force, in regard to physical qualifications, certification, and conformity to established group expectations of the community he serves.

When our superintendent has the teacher before him, how will he judge her? How determine her possibilities of success? The man-to-man army-officer rating system adapted by Rugg will probably be most suggestive as to the system he will use. He will, of course, have all such data as experience, training in school, and all tangible data possible before him in black and white. (A standard form of application blank will have been filled in.) The superintendent will have before him the confidential reports of the applicant's previous employers. The county superintendent will generally consult beforehand also with local boards, in the many instances where supervision has been inadequate; this usually in cases of reelection. Somewhere in the employing officer's mind will be the questions: "How will this teacher fit into the existing scheme of things in this particular school? How will she get along with the faculty there now? How will

the children and her patrons take to her?" The wise superintendent will do a good deal of thinking. Our study shows he will not overlook at least the following: (1) Education and scholarship; (2) probable power in discipline or governing skill; (3) teaching skill or knowledge of methods; (4) strength of personality—(the superintendent will interpret this in his own way); (5) understanding of and sympathy with children; (6) cooperation with and loyalty to her employers and fellow workers. A surprising number of principals and superintendents would like to know if she can and will turn in prompt and accurate reports.

Now some of these points can be ascertained only in part, and the best of superintendent-judges will simply endeavor to cut down the element of guesswork to the greatest extent possible. He will need to study with great earnestness and to endeavor to apply all the principles he can get hold of. It is a job in which long and earnest efforts to improve will result in enormous and far-reaching effects in himself. And the reward lies in greater returns in the educative efforts put forth by his force of workers in the development of the coming generation of his city. The selection of teachers is logically the superintendent's most important duty, and demands his finest artistry.

Perhaps it is true that communities select their teachers somewhat in the same haphazard and irrational way that men select their wives. But the movement toward standards of selection, at any rate, is very definite at least in the field of teacher management. And this is timely, for our traditional superstructure of educational management built on a foundation of the sands of "intangible values" will be bowled over in short order unless placed on the firmer grounds of demonstrable results secured only by definitely evaluated methods.

JOHN M. SEASHOLTZ.

(Continued from Page 43)

his own business. He keeps in touch with the office daily and is thoroughly conversant with the finances and the business aspects of the school system. During his incumbency as president, the board has purchased a number of valuable school sites and erected two grade buildings and a large junior high school. A thorough study of the school building plant of the city with the cooperation of the state department of public instruction was completed in September and on its recommendations the school board asked the people to vote them bonding power to the extent of $3,500,000 at the November election. This loan carried on a vote of almost four to one and as a result the school board will be able to extend its building and remodeling program.

OBSTACLES WE OVERCOME IN MAINTAINING GOOD SCHOOLS.

(Continued from Page 44)

an occasional dance or theatrical performance. These numerous little complaints always find their way into our board meetings, and the entertainment which they furnish us on meeting nights often takes away the dullness of a routine business meeting. Our board makes no effort to dictate the actions of our faculty. So long as they do their work well and conduct themselves properly we do not attempt to dictate where they shall trade, what company they keep, or how long they shall stay up nights.

What we ask is results. We want value received for the taxpayers' money which we spend, we want our school to be equal to the best. Four years ago we started our campaign for a school that would be "the equal of the best." Slowly, gradually, we have accomplished our purpose. Gradually our scholarship has improved and our standing with our state university has improved until today we are where we set out to be. We are recognized by our state university as being "the equal of the best."

In that campaign for better schools our board of education has fought many battles and overcome many obstacles. We have overcome public indifference, taxpayer opposition to increased school taxes, public antagonism to school athletics, "cracker barrel" and "peanut" politics, and many other minor obstacles. But the results we have obtained have been well worth all we have gone through. We have a better school and a larger school, our enrollment being nearly doubled since our standing began to improve. We have a better spirit not only in the school but in the entire community. We feel that our four-year battle for a better school has been amply rewarded by the many benefits we have received.

THE STUDENT WAGE EARNER.

(Continued from Page 48)

Another member took up the thread of the argument, and secured its strands.

"Why every one of those chances to work is a test of the worker—not just of his ability, but of his character, in his giving up or sticking to it. Why—why the whole thing is infinitely more than a question of expediency, money for the young people, young people for the high school. Of course, the school board should undertake this. With its test of character and ability, and its element of democracy, and its tendency to a proper independence, what we are launching is itself educational."

—The new $1,000,000 high school to be built at New Rochelle, N. Y., will be called the Woodrow Wilson High School. The school is to be erected on a recently acquired site and will be surrounded by a large park with a lake on either side.

NEW BOOKS

Essentials of Algebra

By David Eugene Smith and William D. Reeve. Cloth, 360 pages. Price, $1.24. Published by Ginn & Company, Boston, Mass.

Every time-honored precedent in the teaching of algebra has been abandoned in this book to make the subject correspond in purpose, content, and method with the newer aims of the high school, the needs of the majority of students, and the newest studies of effective secondary teaching method. Primarily algebra is a subject which every educated man needs as a cultural tool, as a civic aid, and as an occupational instrument. For these purposes, at least so far as the student who is not going to college and who does not intend to enter a technical field of work, a group of rather simple principles and operations are adequate. For the prospective college student, and for the student who intends to take up a trade involving the exact sciences, some further strictly mathematical study is essential. From experience the authors hold that the formula and its use, graphs, directed numbers, the elementary algebraic operations, and linear equations with one unknown, are sufficient for a majority of high school students who come within the first classification mentioned above. For the second group a complete treatment of fundamental operations, fractions, fractional equations, ratio, etc., simultaneous equations, numerical trigonometry, powers and roots, and quadratics, are necessary and should be taught quite formally and thoroughly. The book splendidly carries out these principles and contains a complete presentation of the entire subject. The approach is simple, the explanations and definitions are especially clear, the tests and problems are based on new and interesting situations taken from industry, science, etc., the introduction of the fundamental trigonometric notions helps to make the gap to the next higher mathematical study easily crossed.

The Fourth "R"

By Homer S. Bodley. Cloth, 271 pages. Price $1.75. Published by Fleming H. Revell Company, New York, Chicago, London.

A keen and active discussion has been going on in many places about the necessity of religious and moral training in our public schools. Serious-minded men of all classes and prominent educators are emphasizing the point that the lack of religious education and a sad ignorance of moral principles are very largely the cause of the moral disorder, of crime and injustice, of selfishness and faithlessness, which has permeated every phase of society. With the iron force of logic they seem to read the handwriting on the wall that a godless people cannot attain happiness and must sooner or later come to grief.

Not so long ago the Institute for Social and Religious Research, of which Dr. Walter Athearn is the president, made a survey in the State of Indiana to discover what the actual knowledge is of the children in the public schools of that state regarding things moral. The research investigation took three years. Various tests were devised and applied to the children. The result is astounding and alarming. More than fifty per cent of the children did not know the fundamental distinction between right and wrong in the simple transactions of life. The committee had chosen Indiana as a fair cross section of our country and the conclusion was arrived at that fifty per cent of the children in all our public schools were in the same condition as those in the public schools of Indiana.

In the month of May, 1920, a convention was held at Palo Alto and Stanford University Memorial Church, California. At this convention it was impressed upon all present that there was a great need of teaching righteousness to the children in the schools. A resolution was drawn up, referring to the "large need of adding to the intellectual culture and education of our schools and colleges a moral and spiritual atmosphere, leading to righteousness with proper conceptions of life, duty and obligation, so that the future electorate of our country may be qualified to perform the functions of government with wisdom and a larger American spirit." The recommendation was made "that the basis of said instruction be the goodness of God with the view that men should honour Him: and that altruism should prevail among men without regard to creed or sect with the purpose of establishing a permanent peace."

To furnish a treatise on the subject of righteousness, in harmony with the above resolution, Homer S. Bodley, who was present at the convention, wrote the book we are reviewing, The Fourth "R". The author expresses his purpose in these words of the preface: "The ideals and lessons coming under this head (righteousness) are such as would be considered wholesome to men of all creeds, and, if followed, would certainly form a fiber of character worthy of emulation by men, women and children of all denominations, races and governments."

We took up the book with eager curiosity, wondering what solution Mr. Bodley would offer for the much mooted and vexed question in which keen-visioned men are vitally interested. We read chapter upon chapter about the goodness of God to man. The more we read the greater was our disappointment. We did not expect that any writer would be able to meet the difficulty successfully of devising a text which would teach religion in our public schools without encroaching on the creed of any particular denomination. But we did expect that something very definite and basic would be said about mortality. We may be pardoned our frank conviction that the book does not give a satisfactory solution. The book will not do any harm and may do some good; but its treatment of the subject will not solve the difficulty in any effective manner. This does not question the author's sincerity and uprightness of intention and his personal religious character. The book does not carry conviction for those who think more deeply, who have a keener and more penetrating knowledge of human nature, and a more thorough idea of God.

The thought forces itself upon the careful reader that Mr. Bodley is not sure of his ground and has a vague and rather hazy notion of the far-reaching extent and deeper significance of the question at issue. It would seem clear at the start, that, if religion and morality are to be taught in the schools, it matters chiefly to define in very specific and unmistakable terms what religion and morality really are and what rela-

tion they have to man and God. Life is, or should be, a sturdy thing. It must have definite aims and final ends. It must be able to seize upon means that will lead to these well-defined ends. Life, moreover, means action and conduct —right action and conduct. Whatever instruction is given in morality must teach what is right and must train to the performance of duties. Does it not seem like building without foundation when the author (page 132) declares that the higher standards of life consist in "cleanness, courtesy, kindness and good-will," without giving any adequate criterion by which we might be able to judge what constitutes these virtues? Further, who will agree that the four characteristics mentioned are the essence of religion? Religion means our relations to God and implies the various duties which flow from this relation. These duties comprise our relations to God, to fellow-man and to ourselves. He who carries out all these relations amid the various conditions of life may be called righteous in a natural sense. But what about taking cognizance of a historical fact which tells us that God established a supernatural religion by sending His Son to earth to redeem man and teach him what he must do to obtain his eternal happiness? Just as there can be no morality without God, so too can there be no religion without taking into account the facts of revelation and the teachings of Christ and His kingdom.

It does appear to the reviewer that Mr. Bodley has put into the idea of righteousness the gentler obligations of love and omitted the sterner demands of justice, and honesty, and sacrifice, which call for stout hearts and a strong grasp of obligations. Righteousness does not consist merely in altruistic service, in kindliness and good-will to others, but essentially consists in the personal service of God. "Altruism or sympathetic service to all men, showing courtesy, kindsess and good-will" (page 269) does not mean true righteousness, because they can be manifested without a belief in God and are in reality nothing else but the modern easy-going idea of humanitarianism. The idea almost haunted us in the reading of the book that man bulks very large in the whole matter and that God is nothing more than a kindly father whose main concern it is to provide in every way and most abundantly for man, without any claim to man's subjection to His will and His law.

Those of us who have studied human life at first hand cannot find common ground in the author's portrayal of social life in the chapter on Sociology. It is idealistic in a measure and imaginative to a degree. No one can escape the facts of life as they are brought to our notice daily. It is not all harmony and concord. There is a tremendous amount of discord, antagonism, selfishness, crime, and activity which aims at the destruction of the common weal. Human nature as it is has vast capabilities for good on the one hand, but on the other it betrays strong tendencies to injustice and cruelty and personal gain. We gain nothing by closing our eyes to these facts. It is a splendid thing to be an optimist, but there are many who call themselves optimists who are not. A genuine optimist recognizes facts and faces them with clear vision. He does not deny the defects which are, but he believes strongly in the amendability of conditions and sets himself the task to remedy them.

Mr. Bodley has no clear idea of God, no clear idea of religion, no definite idea of morality, no penetrating concept of human nature. Such is our estimate of the content of his book. Hence he is not in position to write a text that will solve the problem of religious and moral education in our public schools. But perhaps there is no one who can achieve that task, because of its innate impossibility. In saying this, frankly yet kindly, we are in no way questioning the personal integrity and sincerity of Mr. Bodley. We recognize gladly the good impulse which prompted him to do his share, as he saw it, toward bettering a condition which is causing much anxiety to earnest and well-minded men and women.

The Story of America and Great Americans

By Henry Eldridge Bourne and Elbert Jay Benton. Cloth, 314 pages, illustrated. Price, $1. Published by D. C. Heath & Co., New York, Boston, Chicago.

The story of America and nearly one hundred great Americans who helped shape our national history is here told interestingly and concisely for fifth grade children. The story gives a well focused picture of early life and customs and places, important events in close relation to the human as well as social and political backgrounds. Several illustrations are not well chosen or well adapted to study by children.

Meal Planning and Table Service

By N. Beth Bailey. Cloth, 128 pages. Price, $1.60. Published by the Manual Arts Press, Peoria, Ill.

This book takes up a very interesting phase of household instruction (1) the art of planning meals for the average family and for the ordinary social occasions in the home, and (2) the rules of setting the table and of table service. The material is splendidly organized for teaching and is based upon thoroughly democratic principles of education.

The Filing Manual

Estelle B. Hunter. Cloth, octavo, 254 pages, illustrated. The Yawman & Erbe Mfg. Co., Rochester, N. Y.

The procedure of arranging business records in systematic form so that they may be instantly available when wanted is one of the big problems of any office, even the smallest. Accurate filing is a necessity which every business man is compelled to appreciate every few days and every week.

The present book is an inclusive manual on filing intended both for classroom and reference use. It is thoroughly scientific in purpose and lays down principles, and describes methods in logical, usable form. The book opens with a historical account of the origin and development of filing in the United States. It then describes in detail the several types of equipment, accessories, and supplies, and shows examples of the best kinds produced by various manufacturers. The principles and rules of indexing and of filing routine are then taken up, and complete rules for handling correspondence, miscellaneous data, charge systems, follow-up materials, card records, transfer methods, etc., are given. The final chapter suggests plans for organizing and administering large central files departments.

The book will be found valuable in the high school commercial departments, in continuation and vocational schools both for reference and for direct study.

(Continued on Page 147)

(Continued from Page 144)

A Superintendent's Suggestions to Teachers

By John Albert Cone, A.M. Cloth, 82 pages. Published by Hinds, Hayden & Eldredge, Inc., New York, Philadelphia, Chicago.

This book is not a formal text on pedagogy or classroom management, but a series of commonsense "does" and "don'ts" for teachers. There is in the sixteen brief chapters much sound educational philosophy, homely wisdom, and useful New England shrewdness. The teachers who will definitely use the positive suggestions and avoid the mistakes which the author warns against can hardly fail.

Schools in Bulgaria

By William F. Russell, Ph.D. Cloth, 101 pages. Published by Teachers College, Columbia University, New York City.

This study is interesting because it permits of comparisons with our own educational development and organization. It is noteworthy that recent and limited as the educational system is, it provides for a complete education—intellectual, moral, vocational, civic, and religious.

Supplementary Exercises in Isaac Pitman Shorthand

New Era Edition, Book I. Paper, 71 pages. Price, 50 cents. Published by Isaac Pitman & Sons, New York.

The graded exercises in this book supplement the rules and principles of the new era edition of Isaac Pitman Shorthand.

Northern Woodlot Trees

By James Berthold Berry. Cloth, 214 pages. Illustrated. Price, $1.20. Published by the World Book Company, Yonkers-on-Hudson, New York.

While this book is announced modestly as a supplement to the author's earlier volume, "Farm Woodlands," it is a complete brief guide to the identification of northern trees of commercial value. The arrangement is simple and systematic, and the material is sufficiently inclusive to give any student a good working knowledge of the subject. The book is valuable for reference in every manual arts shop.

Essential Language Habits

By Esther M. Cowan, Annette Betz, W. W. Charters. Cloth, 278 pages, illustrated. Published by Silver Burdett & Co., New York, Newark, Boston, Chicago.

This book is prepared for the distinct purpose of giving children a mastery over language as an essential tool of intellectual and social life. It seeks to habituate children in correct usage in all their activities and to carry the language work actively over into the play, study and work of their school and home life. While the course is a minimum course seeking to include only essential grammatical principles and definitions, it includes rather broadly all difficulties and common errors which are met. The work of the present book is specifically for the third grade. The best devices of literary selections, games, dramatizations, drills and original compositions are introduced in carrying out the principles of the project method.

How We Travel

By James Franklin Chamberlain. Cloth, 182 pages. Illustrated. Published by Macmillan Company, New York.

This little book tells how the world travels. It goes to foreign countries and describes the mode of travel from the jinrikisha to the reindeer sled, from the ox-cart to the automobile, from a gondola to an ocean steamer. The text is instructively presented and accompanied by many interesting illustrations.

How We Are Sheltered

By James Franklin Chamberlain. Cloth, 156 pages. Illustrated. Published by the Macmillan Company, New York.

Here the author tells how the inhabitants of the earth are housed. There are houses of snow, of earth, of wood, of stone, baked clay and what not. All climes and countries, from the tropical south to the frigid north, come into play. The book also describes how building materials are obtained and manipulated. Finally the elements of light and heat are described.

Elementary School Costs in New York.

By R. O. Stoops, prepared under the auspices of the Educational Finance Inquiry Commission. Paper bound, 123 pages. Published by the Macmillan Company, New York.

The compiler presents a series of tables showing the per pupil cost of the schools in both urban and rural districts. He also deals with the costs of kindergartens and of special as well as regular academic subjects.

The report devotes some space to the question of cost accounting and notes that while many school systems keep their records in accurate form, others are negligent so that accurate comparisons are difficult.

Pitman's English and Shorthand Dictionary

Based on the original work of Sir Isaac Pitman. Definitions by Arthur Reynolds, M.A. Cloth, 791 pages. Price, $3.50. Published by Isaac Pitman & Sons, New York.

This work is both an English and a shorthand dictionary and will serve practically every purpose of the shorthand writer for a rather complete defining dictionary. The book contains upwards of sixty thousand words, a small list of technical and unusual words, and a comprehensive list of proper names. The definitions which are quite brief but complete have been supplied by an Oxford scholar. The book is the standard reference work.

School Records and Reviews

By George D. Strayer and N. L. Engelhardt. Paper cover, 85 pages. Published by Teachers College, Columbia University, New York City.

In this pamphlet the authors argue for uniformity in records and reports of school systems and provide an outline of the items described and the manner of filling them out and rating the several items is explained.

Forging and Smithing

By Lynn C. Jones. Keratol, octavo, 211 pages. Price, $2. The Century Co., New York.

While this book covers the broad field of forging and blacksmithing, it is essentially a textbook and will be welcomed in any type of school where forging is taught.

Parts one and two are devoted respectively to the shop and its equipment, and to shop methods and detailed processes of forging. Part three utilizes this background of trade principles and practices in a series of 21 practical problems intended to give the student or apprentice ample opportunity for applying all the tools and shop processes to situations which the blacksmith commonly meets. The jobs are well graded, and the tools, utilities, and repairs are of interest to the boy and of value for the school and home shop.

—Springfield, Mo. The school board will submit the proposition of a 30 cent additional levy to the voters at the April election.

The farm application is kept clearly in mind and several of the problems are distinctly agricultural in purpose.

The appendix gives numerous tables of weights, sizes, etc., and provides much information which is usually scattered about in technical handbooks and is not available for the blacksmith.

The book is a worthy addition to the Century Vocational Series.

How to Debate

By Robert W. Babcock and John H. Powell, Jr. Cloth, 288 pages. Price $2.00. Published by J. B. Lippincott Co., Philadelphia, London, Chicago.

Books on debating issued in recent years have been largely handbooks intended for private study. They have sought to teach not only the technique of preparing for a debate and of presenting a debate, but have included lists of subjects for discussion, references, principles of public speaking, and much other related materials. They served a purpose, but they failed to function successfully for school use where the printed page is supplemented by a teacher and where debating is a definite school subject with aims other than a single successful appearance on the debate platform, or a victory on a single occasion.

The present book aims to teach principles and general methods only, and to provide its users with skill in studying a given question, and reasoning correctly from facts and principles. It is organized strictly as a text and passes over entirely those many sidelights and "helps" which the older books give. It includes logical statements of the principles (a) of argumentation, (b) of gathering and preparing material on a debate question, (c) of positive and constructive reasoning, (d) of methods of refutation and rebuttal, and (e) of public speaking as applied to debating. The book will be welcomed by teachers and debate coaches everywhere.

The Management of Smaller Schools

By C. Ray Gates. Cloth, 174 pages.. Price, $1.20. Published by Houghton Mifflin Co., Boston, New York, Chicago, San Francisco.

This book is a very simple statement of methods and principles of managing the school, or schools, of a small town. It has been prepared with the background of considerable experience and observation in the middle west, and it is practical and helpful, rather than original and philosophical. It frankly recognizes the "job" which the superintendent or supervising principal has on his hands in preparing to open the schools in the fall, in handling teachers and supervising instruction, in managing the office, in closing the school year, etc., and discusses each of these problems and suggests a successful method of handling them. The chapters which define the duties, relations, and responsibilities of the superintendent, of the high school principal and of the grade principal are the best in the book and constitute a fine professional discussion of these important offices. The chapter on the course of study lacks a discussion of the fundamentals of education in the full sense and fails to specify the subjects to be included. It gives only a few principles of the mechanics of curriculum building.

Industrial History

By Harry B. Smith. Cloth, 305 pages, illustrated. Published by The Macmillan Company, New York.

This is the most satisfactory industrial history presented up to this time for use in vocational, continuation, and high schools. It is brief, simple and understandable and interprets periods, industrial conditions, and developments with true historic impartiality. The final chapter on industrial education, is a little outside the general subject matter of the book.

The Early Herdsmen

By Katharine E. Dopp. Cloth, 231 pages, illustrated. Rand McNally & Co., Chicago, New York.

Fact and fiction, theory and mere assumptions are skillfully blended in this book which is intended to give children a picture of the life and habits of mankind in the neolithic age. We doubt whether children will be able to distinguish facts for suppositions, and we question the desirability of spending much time on the subject especially in view of the crowded condition of the course of study.

Special and Industrial Studies for the Elementary Grades

By Jane Betsy Welling and Charlotte W. Calkins. Cloth, 12 mo, 371 pages. Price $2. J. B. Lippincott Co., Philadelphia.

If we sift out some of the assumptions concerning the early life of the race and take only the fact-based problems and studies we shall find much of value and interest in this outline. The material is well grade and carefully presented.

The Pilot Arithmetics

Book II by Harry B. Marsh and James H. Van Sickle. Cloth, 304 pages, illustrated. Published by Newson & Co., New York, Chicago.

This book continues the solid, practical work begun in Book I and develops for the fifth and sixth grades the three large topics of common fractions, decimal fractions, and percentage. The work is presented in orderly, systematic form. Children are led to understand the processes and principles by actual understanding of simple situations with which they are familiar and which call for figuring. They are thus interested and prepared to learn rules and methods and to understand their direct application to themselves and to life. The fundamental operations are constantly stressed and there are oral and written tests in plenty. Home, sport, vacation, school, and other child activities supply the bulk of the problem material.

Teachers' Manual for the Pilot Arithmetics

By Lou Belle Stevens and James H. Van Sickle. Cloth, 256 pages. Published by Newson & Co., New York, Chicago.

Contains concrete suggestions and a wide variety of aids.

Automotive Manual

By Albert Leroy Taylor and A. Harold Blake. Cloth, 178 pages, illustrated. The Macmillan Co., New York, N. Y.

This book provides a brief course in automobile mechanisms and suggests a series of practical maintenance and repair jobs. The work is ample for the high school which has limited equipment and time, and where the course is cultural and general in purpose, rather than strictly vocational.

PROPOSED SALARY SCHEDULE.

—A schedule of proposed salaries for school teachers of New York City has been prepared by a subcommittee of teachers for presentation to the state legislature. The schedule which has been incorporated into the proposed bill is as follows:

Superintendents, $20,000 a year.
Assistant Superintendents, $12,000.
Examiners, $9,000.
District Superintendents, $8,000.
Directors, $9,000.
Directors in special grades (eight men affected), $9,000.
Assistants to Directors (Schedule 6), $7,500.
Special teachers a bonus of $300 a year.
Principals of high schools, $8,000.

High School—	Min.	No. Inc.	Each Inc.	Maxm.
Assts. & Librarians	$2,500	11	$200	$4,700
Assts. & Adm. Assts	4,500	4	250	5,500
Clerical & Laboratory	1,500	12	125	3,000
Elementary schools—				
Principals	5,000	3	500	6,500
Assts. to Principals	4,100	3	600	4,700
Teacher Clerks	1,400	10	100	2,400
Special Branches	2,400	8	200	4,000
7 A to 9 B	2,400	8	200	4,000
Kindergarten, 6 B	1,800	12	150	3,600
Other positions—				
Clerical Asst., High Schools	1,900	11	150	3,550
Heads of Model Schools	5,000	3	500	6,500
Teacher Clerks, H. S.	1,500	12	125	3,000
Director, Special Branches	7,000	3	250	7,750
Assistants to above	5,500	3	250	6,250

Pupil teachers, $3 a day.
Teachers in training, $4.
Substitutes in elementary schools, $8.
Substitutes in high schools, $10.

Assistants in training schools will get the same pay as assistants in the high schools, plus one additional increment. Assistants to Principal in the deaf, probation, cripple, parental and truant schools and junior high schools, will receive the same as assistant to Principals in elementary schools, plus an additional increment.

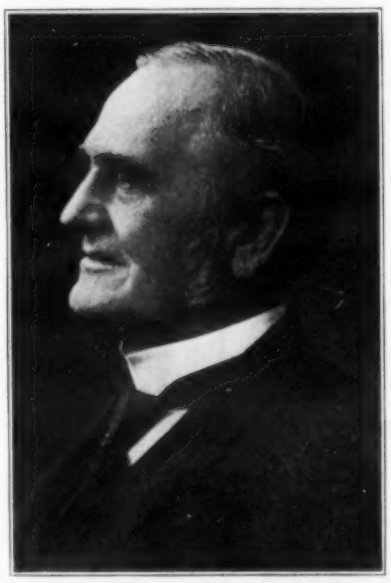
Teachers in the continuation schools will get the same as assistants in high schools, and administrative assistants in continuation schools, the same as assistants in high schools. Clerical assistants in the continuation schools will get the same as those in high schools.

Principals in continuation, trade, parental, probation, deaf and crippled schools will receive the same as elementary school principals, with an additional $500 increment; vocational school teachers the same as those in the high schools.

DEATH OF MR. SHALLCROSS

By William Dick

The death of Thomas Shallcross on March 16 takes from the Philadelphia Board of Public Education a member who gave it diligent, efficient and willing service for more than thirty-three unbroken years. His accession to this Board had been preceded by years of service as a member and finally President of the 35th Ward Board of School Directors, so that he came fully equipped by experience to appreciate, understand and aid the development and expansion of a public school system rapidly growing to tremendous size. During his service as a member of his Ward Board of School Directors and as a member of this Board he saw the expenditures of the school system increase about thirty fold, its teaching force about four fold and its pupils about three fold. He was proud of the fact that he had been a dominant figure in aiding to mold and direct such vast growth, and fortunate, indeed, was he to have lived so long and to have worked so well in such a great enterprise.



THOMAS SHALLCROSS,
Member School Board,
Philadelphia, Pa.

He was at once assigned to the committees of the Board that had charge of the properties and the supplies of the public school system. His experience as a real estate expert and his knowledge of the markets in which school supplies were bought and sold were of incalculable value to the Board and since 1916 as chairman of the Committee on Property it is certain that not a dollar of the public funds was ever wasted, either in purchase of necessary new sites or the sale of old and unusable ones, because of his intimate knowledge of real estate values. The long and tedious hours spent by him in examination and approval of bills for supplies alike attest his conscientious devotion to the duties assigned him.

His interest in the growth and expansion of the Northeast High School was intense. He loved the ground on which it was built; he loved the very walls that divided it into classrooms, he loved to tread its halls, to meet and mingle with its professors and its pupils. In the whole school system there was convincing evidence that nothing was quite so near to his heart as that High School and the Board records with pleasure its appreciation of the grateful tribute of the teachers and students of that school in placing the bas-relief bronze tablet of the head of our deceased member on the walls of the gymnasium which has been called "Shallcross Hall."

The members of this Board found association with our deceased member a genuine pleasure. His genial nature, his affable disposition, his ever present sense of humor all alike made work with him in school affairs easy and pleasant and his memory will long be cherished by all of us. To his bereaved family we extend our deepest sympathy in this hour of bereavement.

Our Reputation is National
Our Service Unexcelled
Positions Kindergarten to University Presidents

ROCKY MT. TEACHERS AGENCY
410 U.S. NAT. BANK BLDG. DENVER, COLO.
WM. RUFFER, Ph. D.....Manager

COME TO
HEADQUARTERS
Free Registration
BRANCH OFFICES:
Portland, Oregon, N. W. Bank Bldg.
Minneapolis, Minn., Lumber Exchange
Kansas City, Mo., 230 Rialto Bldg.

COLLEGE GRADUATES recommended exclusively
—except in vocational fields. No elementary school positions. Any subject from high school up. Leading bureau for teachers of Commercial, Industrial, and Physical Education. 20th year. Covers all states. Tell us your needs.

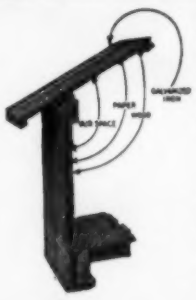
SPECIALISTS' EDUCATIONAL BUREAU
A BUREAU FOR SPECIALISTS

ROBERT A. GRANT, Pres.,
Odeon Bldg., St. Louis, Mo.

FISK TEACHERS' AGENCY
1020 McGEE ST.
KANSAS CITY, MO,
J. A. DEVLIN, MANAGER

Associated Fisk Agencies
in Principal Cities.

The Westminster Teachers' Bureau
specializes in securing Christian teachers, officers and helpers for schools, colleges and universities—private, public and denominational—and in assisting trained, Christian teachers and other workers to larger fields of service. Write today for information to
Henry H. Sweets, Manager, 410 Urban Building, Louisville, Ky.



Bossert Schools
Are Warm in Winter and Cool in Summer

We are equipped to furnish any size building on short notice. Prices of same depend on requirements and State Laws—but in every case are the lowest for quality of material supplied. Remember, this is not a cut lumber proposition, and the cost of erecting is a very small item. While not essential, as any unskilled labor can do it, we will, if you desire, arrange to erect all buildings. Buildings can be taken down and re-erected any number of times without marring a single feature.

We have made portable school houses for other people for over 25 years. Now you can buy Bossert School Houses with all our new patents and improvements direct from us and save money for your school board.

Write us full requirements and we will send details of cost of building completely erected.

LOUIS BOSSERT & SONS, Inc.
Builders of School Houses for over 25 years.
1323 Grand Street — Brooklyn, N. Y.

CAPS AND GOWNS

We have a new stock of High School and Collegiate caps and gowns. Information Upon Request. The Wingate Co., 543 Fifth St., Des Moines, Iowa.

DIPLOMAS

Diplomas—in any quantity—Tell us what you require and samples with quotation will follow. Ames & Rollinson, 206 Broadway, New York, N. Y.

PICTURES

The Copley Prints for school walls have highest endorsements. See Illustrated Catalogue. (Mention this Journal.) **Curtis & Cameron, 14 Harcourt St., Boston.**

"PLANS" FREE.

We still have a limited supply of this authoritative book on classroom planning which will be sent without cost or obligation to any interested person on request. If you have not yet had a copy of this unusual book, write for your copy today. A-B Stove Company, Battle Creek, Mich.

WANTED

A few high-grade salesmen are wanted by a manufacturer of a product used by schools. This product is required by law in many states and is primarily essential to every school. If you can sell to school boards and wish to become permanently established with a reputable company, write your qualifications, salary expected, experience, etc., to M-21, American School Board Journal, Milwaukee, Wisconsin.

PROPOSALS

Proposals for Indian Supplies—Department of the Interior, Office of Indian Affairs, Washington, D. C., Mar. 15, 1924. Sealed proposals, plainly marked on the outside of the sealed envelope: "Proposal for Groceries" (or other class of supplies, as the case may be) and address to the "Commissioner of Indian Affairs, U. S. Indian Warehouse, 1749 West Pershing Road, Chicago, Ill.," will be received until 10 o'clock a. m. on each of the following dates and on the class of supplies specified, and then opened: Dry Goods, May 1, 1924; Underwear, hosiery, gloves, suspenders, hats and caps, May 6, 1924; Notions, May 1, 1924; Groceries, May 3, 1924; Agricultural implements, Wagons, etc., Apr. 29, 1924; Schoolbooks, etc., May 7, 1924; Chinaware, etc., Apr. 28, 1924; Automobiles, supplies, May 7, 1924. Similar proposals on Clothing and piece goods, addressed to the "Commissioner of Indian Affairs, Washington, D. C.," will be received until 10 o'clock a. m., on Apr. 25, 1924, and then opened. Schedules covering all necessary information for bidders will be furnished upon application to the Indian Office, Washington, D. C., or the U. S. Indian Warehouses at Chicago, St. Louis and San Francisco. The Department reserves the right to reject any or all bids or any part of any bid, and to post tentative awards promptly, subject to correction. CHAS. H. BURKE, Commissioner.

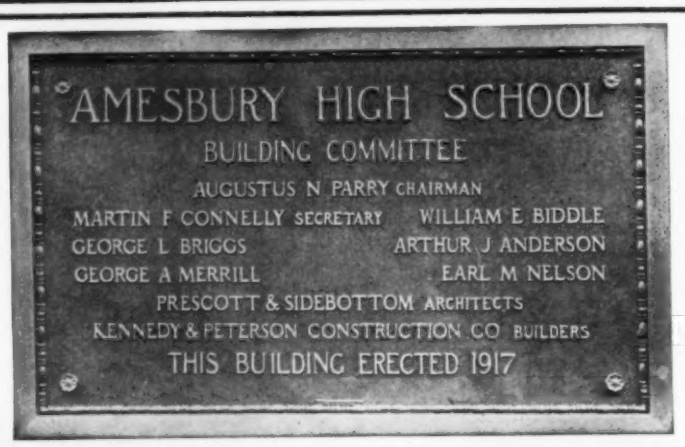
WANTED

Will pay 25 cents for copies of February and December, 1921. Copies must be in good condition. Address Subscription Department, American School Board Journal, Milwaukee, Wis.

FEDERAL
STEEL LOCKERS AND SHELVING
are made right——
and priced moderately——

Ask for Catalog
Federal Steel Fixture Company
Chicago

Equip Your Schools with FEDERAL Steel Lockers and Shelving



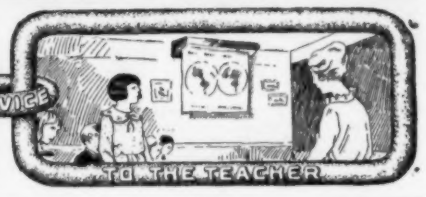
HONOR ROLLS—MEMORIAL TABLETS—IN BRONZE
MODELED, CAST AND FINISHED BY
ALBERT RUSSELL AND SONS CO.
125 MERRIMACK ST. — NEWBURYPORT, MASS.

THE ARMSTRONG COMPANY
SECTIONAL SCHOOL BUILDINGS

The **ARMSTRONG SECTIONAL SCHOOL BUILDINGS** are complete in every detail, having double floors, double side walls and ceilings. With every modern convenience makes them the best **Portable School Buildings** on the market today. With the perfect lighting and ventilation, they are without equal. Our buildings can be taken down and moved to another location without mutilating in the least any of the parts. We can prove it. If you write us what you desire, we wil. send you full details. We are specialists in Sectional School construction.

THE ARMSTRONG COMPANY, P. O., 401, ITHACA, NEW YORK

TEACHER AGENCIES



PROFESSIONAL PERSONNEL SERVICE

Our employment work consists of administrative and departmental work of all kinds in public and private schools, colleges and universities—including superintendencies, principalships, supervisorships, also such positions as business managers for schools, purchasing agents, registrars, accountants, secretaries, cafeteria directors, trained nurses, etc. This is a professional personnel bureau, with special facilities for service to school executives and school boards. The whole endeavor of EDUCATION SERVICE is service. It is organized for service, not profit.

EDUCATION SERVICE operates the **Fisk Teachers Agency** of Chicago, and **National Teachers Agency** of Washington, New York, Boston, Chicago and Evanston, and the **American College Bureau.**

EDUCATION SERVICE

Ernest E. Olp, Director

Steger Building, Chicago

Security Bldg., Evanston

FOR SERVICE — EDUCATION SERVICE — NOT PROFIT

1254 Amsterdam Ave., New York

14 Beacon St., Boston

Southern Bldg., Washington

We Specialize in Brains

Character, Personality, Teaching Power and Service. By advertising more widely than any other Agency, and by visiting State and District meetings, schools and colleges, from Dakota and Minnesota to Texas and Oklahoma, we have built up the largest SELECT LIST of LIVE teachers ever assembled. *Our tenth year of recommending only when asked to do so by employers.* Owing to our professional standards most of the Higher Institutions as well as the best Secondary schools in forty-four States and three foreign countries used our service the past season. Fifteen hundred square feet of office space, with every known equipment for doing efficient work, INCLUDING A FINDEX BUILT TO ORDER, enables us to fill vacancies from Kindergarten to University with teachers who have been tested, investigated, and, in many cases personally interviewed by our representatives direct.

A Distinct Service for Educators Who Appreciate Ethical Standards.

THE WESTERN REFERENCE & BOND ASSOCIATION

Department of Education, 499 Gates Bldg.

KANSAS CITY, MO.

Educational Service Bureau — Quality and Quantity

Three Classes of Teachers Who Should Enroll in Our Agency

1—Those who desire a better locality.
2—Those who want a better salary.
3—Those who possess average or more than average ability. Write Manager E. A. Freeman for booklet.

EDUCATIONAL SERVICE BUREAU
Handicraft Bldg., 89 So. Tenth St.
Minneapolis, Minnesota

THE N.E.S.

The Biggest and Best TEACHERS' AGENCY In the United States

Main Office: DENVER, COLO., 939 S. University Ave.

COVERS THE CONTINENT. WRITE FOR OUR FREE LITERATURE. DO IT NOW.

Schermerhorn Teachers' Agency

Established 1855
CHARLES W. MULFORD, Prop.
366 Fifth Ave., between 34th and 35th Streets, NEW YORK
Branch Offices: 1836 Euclid Ave., Cleveland, Ohio.
406 Union Trust Bldg., Pittsburgh, Pa.
A Superior Agency for Superior People. We Register Only Reliable Candidates. Services Free to School Officials.

Southern Teachers' Agency

COLUMBIA, S. C.
CHATTANOOGA, TENN.
RICHMOND, VA.
LOUISVILLE, KY.

Continuous registration in four offices.

No advance fees.

Covers Middle Atlantic, South and Middle West

F. T. Persinger, Manager

THE BEST SERVICE COMPANY

212 Walker Building, Minneapolis, Minn.

SCHOOL BOARDS: If you need Teachers, Superintendents or Principals, let us co-operate with you.

TEACHERS: If you are looking for a position, we can place you.

OUR MOTTO: The right teacher for the right place—prompt service.

TEACHERS WANTED
For Schools and Colleges—Every day of the year
NATIONAL TEACHERS AGENCY, INC.
D. H. COOK, Gen. Mgr. HOME OFFICE—Philadelphia, Pa.
—BRANCH OFFICES—
Pittsburgh, Pa.; Indianapolis, Ind.; Syracuse, N. Y.; Northampton, Mass.
No charge to employers—No charge to candidates till elected.
Positions waiting—correspondence confidential.

ALBERT TEACHERS' AGENCY
25 E. Jackson Boulevard, Chicago, Illinois

Established 1885—Still under same active management. Best Schools and Colleges permanent clients. Best qualified men and women on our available list. Prompt service.
Other Offices—New York, Denver, Spokane.

CENTRAL EDUCATIONAL BUREAU
Metropolitan Bldg., St. Louis, Mo.

Free and dependable service to school officials.
Recommends only well qualified teachers.

The H. D. Yates Teachers' Bureau

728-30 Stahlman Building, Nashville, Tennessee.

We do not confine our efforts to Southern territory and appreciate vacancies from other sections. We have teachers enrolled from all states.

Albany Teachers' Agency, Inc.

81 CHAPEL STREET, ALBANY, N. Y.

Provides Schools and Colleges with Competent Teachers.
Assists Teachers in Securing Positions.

WILLARD W. ANDREWS, President F. WAYLAND BAILEY, Secretary

"THE AGENCY OF QUICK SERVICE AND EFFICIENCY"

WESTERN TEACHERS' EXCHANGE

DENVER, COLORADO	CHICAGO, ILLINOIS	MINNEAPOLIS, MINNESOTA	BERKELEY, CALIFORNIA
Gas & Electric Building	Peoples Gas Building	The Plymouth Building	Berkeley Bank Building

We Render Efficient Service to School Boards and Teachers
The Only Agency That Maintains Educational Men Constantly in the Field

---

The Pratt Teachers' Agency

No. 70 FIFTH AVENUE, NEW YORK

Receives calls at all seasons for college and normal graduates, specialists, and other teachers in colleges, public and private schools, in all parts of the country. Advises parents about schools.

WM. O. PRATT, Manager

Some of the very best teachers of the land are found in the territory covered by the
OHIO VALLEY TEACHERS AGENCY,
A. J. JOLLY, Mgr.
Mentor, Ky. - - 412 Sycamore St., Cincinnati, O.

PARKER TEACHERS' AGENCY

Twenty Years of Real Service to School Boards

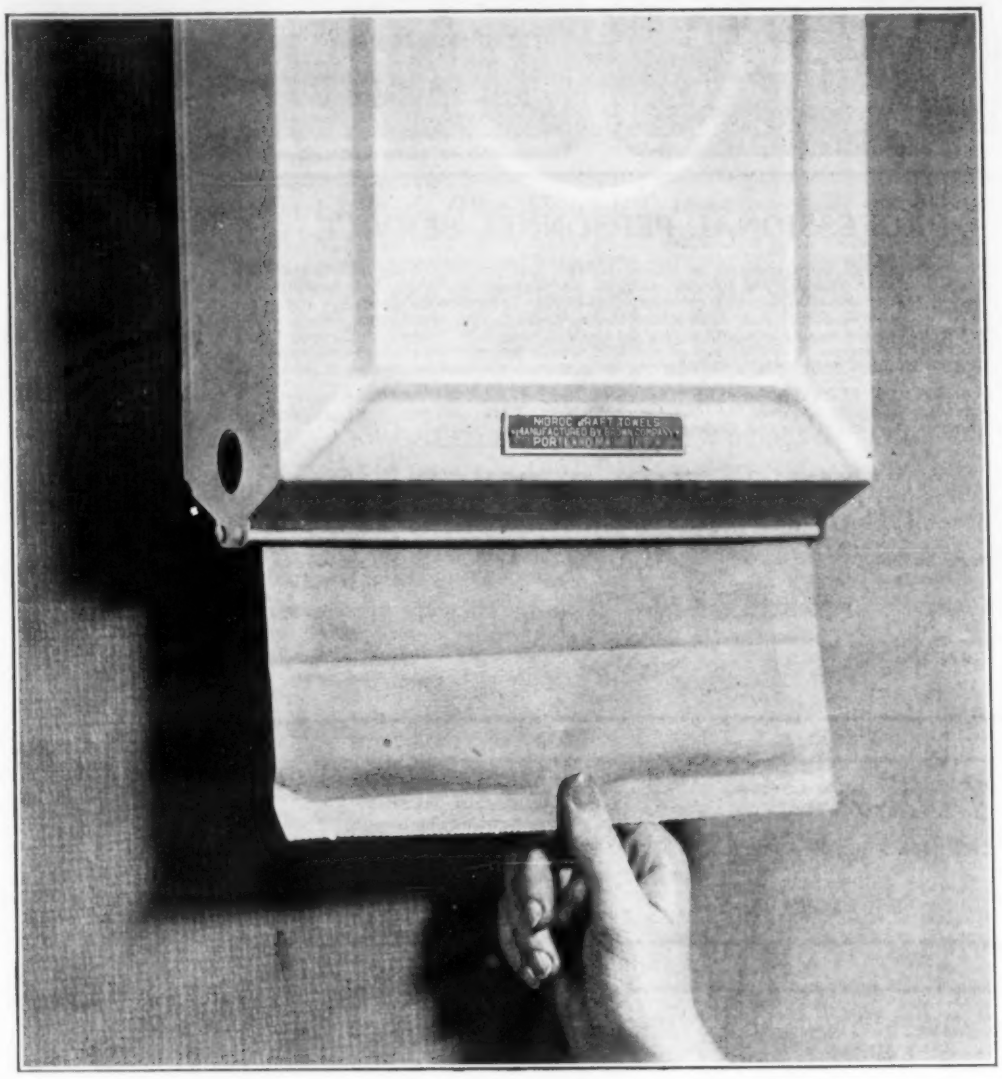
12 South Carroll Street
MADISON, WISCONSIN

INTERSTATE TEACHERS' BUREAU,
147 WHITEHALL ST., ATLANTA, GA.
Organized 1901. Prompt and effective service.
Member, National Association of Teachers' Agencies.

THIS convenient cabinet keeps Nibroc Towels clean and dust-free, and serves them singly.

Easy to fill—

Merely open front, which is hinged at bottom. Slip the package of 250 towels into place. Draw out wrapper. Lock cabinet. That's all.



Nibroc—a paper towel

that seems made for school children

If the Nibroc Towel were made especially to your order, it could not be better suited to school use.

The Nibroc fibre is highly absorbent—takes up the last drop of moisture. It doesn't lint—doesn't tear easily—doesn't get soggy. You can wipe hands and face vigorously with a Nibroc Towel. It is agreeable to use, and leaves a pleasant feeling that encourages children to be clean.

The Nibroc Towel doesn't roughen the hands.

It means a fresh, clean towel for every child. Used once, then thrown away, it doesn't spread colds through the class, as a common towel is apt to. It is economical, too. The Nibroc Cabinet serves one at a time, enough to thoroughly dry both face and hands.

You yourself will enjoy using the Nibroc Towel. Let us send you enough samples to make a thorough test in your office or home.

The manufacturers, Brown Company, Portland, Maine, will be pleased to mail to members of School Boards or of any educational institution a sample pack of Nibroc Towels.

School Goods Directory

The names given below are those of the leading and most reliable Manufacturers, Publishers and Dealers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms.

AIR CONDITIONING APPARATUS
Air Conditioning & Engineering Co.
American Blower Company
Buckeye Blower Company
Buffalo Forge Company
Midwest Air Filters, Inc.
Nelson Corporation, The Herman
Reed Air Filters, Inc.,

AIR FILTERS
Midwest Air Filters, Inc.
Reed Air Filters, Inc.,

ASH HOISTS
Gillis & Geoghegan

AUDITORIUM SEATING
American Seating Co.
Arlington Seating Company
Heywood-Wakefield Co.
Kundtz Company, The Theodor
Newton & Holt Company, The
Peabody School Furniture Co.
Steel Furniture Company

BASEMENT SASH, STEEL
Detroit Steel Products Company

BASEMENT WINDOWS, STEEL
Detroit Steel Products Company

BLACKBOARDS—COMPOSITION
Beaver Products Co., Inc., The
Beckley-Cardy Co.
N. Y. Silicate Book Slate Co.
Rowles Co., E. W. A.
Standard Blackboard Company
Weber Costello Co.

BLACKBOARD-SLATE
Keenan Structural Slate Co.
Natural Slate Blackboard Co.
Penna. Structural Slate Co.

BOILERS
Kewanee Boiler Company.

BOOK CASES
Globe Book Company
Library Bureau
Newton & Holt Company, The

BOOK COVERS
Holden Patent Book Cover Co.
Iroquois Publishing Company.
Peckham, Little & Co.
Walraven Book Cover Co., A. T.

BOOK PUBLISHERS
American Book Company
Heath & Co., D. C.
Houghton, Mifflin Co.
Iroquois Publishing Company
Laidlaw Brothers
Lippincott Company, J. B.
Little, Brown and Company
Newson & Company.
Pitman & Son, Isaac
Rand, McNally & Company
World Book Company

BRUSHES
Palmer Company, The
Robertson Products Co., Theo. B.

BUILDING MATERIALS
Alabama Marble Company
Asbestos Buildings Company
Detroit Steel Products Company
Durlron Co., Inc., The
Indiana Limestone Quarrymen's Assn.
Knapp Bros. Mfg. Company
National Bldg. Granite Quarries Assn.
Structural Slate Company

BUSSES
International Harvester Co. of America

CHAIRS—FOLDING
Maple City Stamping Company

CHARTS
Nystrom & Company, A. J.
McConnell Map Company

CAFETERIA EQUIPMENT
Coe Manufacturing Company
Crane Company, Wm. M.
Pick & Company, Albert
Sani Products Co., The
Van Range Co., John

CHALK TROUGHS
Dudfield Mfg. Company

CHEMICALS
Heil Chemical Co., Henry

CLOCKS—PROGRAM
Cincinnati Time Recorder Co.
International Time Recording Company.
Landis Enc. & Mfg. Co.
Standard Electric Time Co.

CRAYON
American Crayon Co.
Binney & Smith
Levison & Blythe Mfg. Company
National Crayon Co.
Peckham, Little & Co.
Rowles Co., E. W. A.
Weber Costello Co.

DEAFENING QUILT
Cabot, Inc., Samuel

DISHWASHERS
Colt's Patent Fire Arms Mfg. Co.

DISINFECTANTS
Palmer Company, The
Robertson Products Co., Theo. B.

DISPLAY CABINETS
Multiplex Display Fixture Company
Shewana Cabinet Works

DOMESTIC SCIENCE EQUIPMENT
A. B. Stove Company
Christiansen, C.
Crane Company, Wm. M.
Freeport Gas Machine Co., Inc.
Kewaunee Mfg. Company
Newton & Holt Company, The
Peterson & Co., Leonard
Pick & Co., Albert
Sheldon & Co., E. H.
Van Range Co., John

DOOR CHECKS
Norton Door Closer Co.
Sargent & Company

DOORS, STEEL-FIREPROOF
Detroit Steel Products Company

DRAFTING ROOM FURNITURE
Christiansen, C.
Economy Drawing Table & Mfg. Co.
Kewaunee Mfg. Company
Sheldon & Co., E. H.

DRAWING MATERIALS
Devoe & Raynolds

DRINKING FOUNTAINS
Century Brass Works, Inc.
Murdock Mfg. & Supply Co., The
Nelson Mfg. Company, N. O.
Puro Sanitary Drink. Fountain Company
Rundle-Spence Mfg. Company
Taylor Company, Hasley W.

ELECTRICAL EQUIPMENT
Adam Electric Co., Frank
American Wiremold Co.

ERASERS
Palmer Company, The
Rowles Company, E. W. A.
Weber Costello Co.

ERASER CLEANERS
Lynn Company, James
Weber Costello Company

FENCES
American Fence Construction Company
Anchor Post Iron Works
Cyclone Fence Co.
Page Fence & Wire Prod. Assn.
Stewart Iron Works Company, The

FILING CABINETS
Library Bureau
Newton & Holt Company, The

FIRE ESCAPES
Dow Company, The
Potter Manufacturing Corp.
Standard Conveyor Company

FIRE EXIT LATCHES
Sargent & Company
Smith Hardware Co., F. F.
Vonnegut Hardware Co.

FIRE PROOF DOORS
Dahlstrom Metallic Door Co.

FIREPROOFING MATERIALS
Asbestos Buildings Company

FLAGS
Annin & Co.
Dettra & Co., Inc., John C.

FLAG POLES
Nelson Mfg. Co., N. O.

FLOOR COVERING
Bonded Floors Co., Inc.
Heywood-Wakefield Co.

FLOORING
Oak Flooring Adv. Bureau

FLOORING—COMPOSITION
Bonded Floors Co., Inc.
Duraflex Company, The
Marbleloid Company

FOLDING PARTITIONS
Wilson Corp., Jas. G.

FURNITURE
American Seating Co.
Arlington Seating Company
Beckley-Cardy Co.
Columbia School Equip. Works
Columbia School Supply Company
Conrades Mfg. Company
Detroit School Equipment Co.
Economy Drawing Table & Mfg. Co.
Heywood-Wakefield Co.
Gunn Furniture Company
Kundtz Company, The Theodor
Lauter Company, The H.
Library Bureau
Maple City Stamping Company
Mutschler Brothers Company
National School Equipment Company
Newton & Holt Company, The
Peabody School Furniture Co.
Readsboro Chair Company
Rowles Co., E. W. A.
Scientific Seating, Inc.
Steel Furniture Company
Standard School Equipment Co.

GAS MACHINES
Freeport Gas Machine Co., Inc.
Matthews Gas Machine Co.

GAS STOVES
A. B. Stove Company

GLASS
Manufacturers Glass Company

GLOBES
Nystrom & Co., A. J.
Weber Costello Co.

GYMNASIUM APPARATUS
Chicago Gymnasium Equipment Co.
Medart Mfg. Co., Fred
Narragansett Machine Company

HEATERS
Smith System Heating Company

HEATING SYSTEMS
American Blower Company
American Foundry & Furnace Co.
Bayley Mfg. Company
Buckeye Blower Company
Buffalo Forge Company
Crane Company
Dunham Company, C. A.
Healy-Ruff Company.
Nelson Corp., The Herman
Peerless Unit Vent. Co., Inc.
Webster & Co., Warren

INK
Commercial Paste Company
F. N. Company, Inc., The
Levison & Blythe Mfg. Company
Rowles Co., E. W. A.

INK WELLS
Jacobus Pneumatic Inkwell Co.
Squires Inkwell Company
U. S. Inkwell Company

JANITORS' SUPPLIES
Masury-Young Company
Palmer Company, The
Pick & Co., Albert
Robertson Products Co., Theo. B.
Van Range Co., John

KINDERGARTEN SUPPLIES
Hammett Company, J. L.

LABORATORY FURNITURE
Kewaunee Mfg. Company
Newton & Holt Company, The
Peterson & Co., Leonard
Sheldon & Company, E. H.

LEVELS
Disston & Sons, Inc., Henry

LIBRARY FURNITURE
Library Bureau
Newton & Holt Company, The

LIGHTING FIXTURES
Beardslee Chandelier Mfg. Co.
Holophane Glass Company

LINOLEUMS
Bonded Floors Co., Inc.

LIQUID FLOOR HARDENER
Sonneborn Sons, L.

LIQUID SLATING
Anderson Blackboard Mfg. Company

LIQUID SOAP
Huntington Laboratories, Inc.
Robertson Products Co., Theo. B.

LOCKERS
Berger Mfg. Company
Durabilt Steel Locker Co.
Durand Steel Locker Co.
Federal Steel Fixture Co.
Lyon Metallic Mfg. Co.
Medart Mfg. Co., Fred
Narragansett Machine Company

LOCKS—KEYLESS
Miller Keyless Lock Co., J. B.
Triple Metals Corporation

MAPS
McConnell Map Company
Nystrom & Company, A. J.
Weber Costello Company

MEMORIAL TABLETS
Russell & Sons Co., Albert

METAL LATH
Berger Mfg. Company

MICROSCOPES
Bausch & Lomb Optical Co.
Spencer Lens Company

MODELLING CLAY
Hammett Company, J. L.

MOTION PICTURE MACHINES
DeVry Corporation, The

PAINTS
Devoe & Raynolds
Hockaday Company, The

PAINT SPRAYING EQUIPMENT
DeVilbiss Mfg. Co., The

PAPER BALERS
Davenport Mfg. Company, Inc.

PAPER TOWELS
A. P. W. Paper Company
Brown Company
National Paper Products Co.
Palmer Company, The
Robertson Products Co., Theo. B.

PASTE
Commercial Paste Company
Levison & Blythe Mfg. Company

PENCILS
Dixon Crucible Co., Joseph
Eagle Pencil Company

PENCIL SHARPENERS
Automatic Pencil Sharpener Co.

PENS
Spencerian Pen Company

PIANOS
Miessner Piano Company

PICTURES
Brown-Robertson Company

PLAYGROUND APPARATUS
Chicago Gymnasium Equipment Company
Everwear Mfg. Company
Hill-Standard Company
Medart Mfg. Co., Fred
Narragansett Machine Company

PLUMBING FIXTURES
Brunswick-Balke-Collender Co.
Century Brass Works, Inc.
Clow & Sons, James B.
Crane Company
Durlron Co., Inc., The
Hoffman & Billings Mfg. Co.
Kelly & Bros., Thos.
Nelson Mfg. Company, N. O.
Rundle-Spence Mfg. Company
Speakman Co.
Vogel Company, Joseph A.
Wolff Manufacturing Co.

PORTABLE SCHOOLHOUSES
American Portable House Company
Armstrong Co., The
Asbestos Buildings Co.
Bossert & Sons, Louis
Circle A Products Corporation
Mershon & Morley
Minter Homes Corp.
Togan-Stiles Company

PROJECTION LANTERNS
Bausch & Lomb Optical Co.
Spencer Lens Co.

RADIATOR HANGERS
Healy-Ruff Company

REINFORCED STEEL
Berger Mfg. Co.

ROLLING PARTITIONS
Wilson Corp., Jas. G.

SANITARY NAPKINS
Cellucotton Products Company

SASH OPERATING DEVICES, STEEL
Detroit Steel Products Company

SASH, STEEL
Detroit Steel Products Company

SASH, VENTILATING
Detroit Steel Products Company

SAWS
Disston & Sons, Inc., Henry

SAVING SYSTEMS
American Banking Machine Corp.

SCALES
Continental Scale Works

SCENERY
Twin City Scenic Co.

SCIENTIFIC APPARATUS
Rowles Company, E. W. A.

SCREW-DRIVERS
Disston & Sons, Inc., Henry

SHOWERS
Hoffman & Billings Mfg. Co.
Speakman Co.

SIGNAL SYSTEMS
Holtzer-Cabot Electric Co.

SOAP DISPENSERS
Soapitor Company

SPRAY-PAINTING EQUIPMENT
DeVilbiss Mfg. Co., The

STAGE EQUIPMENT AND SCENERY
Jackson Corp., A. P.
Lee Lash Studios
Twin City Scenic Company

STAIR TREADS
Norton Company

STEEL SASHES
Detroit Steel Products Company

STEEL STORAGE CABINETS
Newton & Holt Company, The
Durabilt Steel Locker Co.
Medart Mfg. Co., Fred

STEEL WINDOWS
Detroit Steel Products Co.
Truscon Steel Company

SWEEPING COMPOUNDS
Robertson Products Co., Theo. B.

TABLES
Gunn Furniture Company
Library Bureau
Mutschler Brothers Company
Newton & Holt Company, The
Rinehimer Bros. Mfg. Co.

TABLETS
Blair Company, J. C.

TALKING MACHINES
Victor Talking Machine Co.

TELEPHONE SYSTEMS
Automatic Electric Company
Federal Tel. & Tel. Co.
Holtzer-Cabot Electric Co.

TEMPERATURE REGULATION
Buffalo Forge Company
Johnson Service Company
National Regulator Company

THERMOMETERS
Wilder-Pike Thermometer Co.

TOILET PAPER AND FIXTURES
A. P. W. Paper Company
Palmer Company, The
Robertson Products Co., Theo. B.

TOILET PARTITIONS
Structural Slate Company

TYPEWRITERS
Underwood Typewriter Company

VACUUM CLEANING SYSTEMS
Spencer Turbine Company, The

VACUUM PUMPS
Nash Engineering Company

VALVES—FITTINGS
Crane Company

VENTILATORS
Buffalo Forge Company
Globe Ventilator Company
Knowles Mushroom Ventilator Co.

VENTILATING SYSTEMS
American Foundry & Furnace Co.
American Blower Company
Bayley Mfg. Company
Buckeye Blower Company
Buffalo Forge Company
Dunham Company, C. A.
Healy-Ruff Company
Midwest Air Filters, Inc.
Nelson Corp., The Herman
Peerless Unit Vent. Co., Inc.

VOCATIONAL EQUIPMENT
American Woodworking Machinery Co.
Buffalo Forge Company
Christiansen, C.
Columbia School Supply Co.
Newton & Holt Company, The
Sheldon & Company, E. H.

WARDROBES
Newton & Holt Company, The
Wilson Corp., Jas. G.

WASTE PAPER BASKETS
National Vulcanized Fibre Company
Newton & Holt Company, The

WEATHERSTRIPS
Athey Company, The

WINDOWS—ADJUSTABLE
Austral Window Company
Detroit Steel Products Company
Truscon Steel Company

WINDOW GUARDS
Badger Wire & Iron Works
Draper Shade Co., Luther O.
Stewart Iron Works Co., The

WINDOWS—REVERSIBLE
Detroit Steel Products Company

WINDOW SHADES
Athey Company
Draper Shade Co., Luther O.
Maxwell & Co., S. A.
Ordinator Company, Inc.
Steele Mfg. Co., Oliver C.

WINDOWS, STEEL
Detroit Steel Products Company

WIRE GUARDS
Cyclone Fence Co.
Stewart Iron Works Co., The

REFERENCE INDEX

If any articles or textbooks cannot be found listed, write our Subscribers' Free Service Department, care of American School Board Journal, Milwaukee, Wis.

BUYERS NEWS

TRADE PUBLICATIONS

Economical Gas Making. The new circular of the Tirrill Gas Machine Lighting Company, established in 1864, manufacturers of the Tirrill "Equalizing" Gas Machine and Cooking, Heating and Lighting Appliance is just off the press and will be mailed to anyone interested addressing the Company at their New York Office, 50 Church Street, New York City.

This circular gives full details in the simplest and most direct manner of their gas machine which is specially designed for the service of individual homes, laboratories, schools, colleges, and factories. In fact, any building located out of reach of public gas service or city gas conveniences.

Gas today is a necessity and the Tirrill Gas Machine makes its own gas automatically as wanted and meets every possible gas deficiency. For cooking in connection with the latest type of gas ranges (smoothtop) it is the best and most economical method for solving all gas kitchen and servant problems.

Issue New Catalogs. The Frank Adam Electric Co., St. Louis, has recently issued two catalogs and two bulletins of interest to school authorities and architects. These are:

Catalog No. 32-1924. Panel Boards—Steel Cabinets. This catalog lists and illustrates the entire line of safety type, sectionally constructed panel boards which the firm manufactures and which are widely used for controlling lighting circuits in school buildings. More school stages are equipped with this type and make of panel boards than any other make.

Catalog No. 25. Knife Switches and Accessories. This booklet includes a wide line of general switches and electric utilities.

Bulletin No. 29. Type P. Safety-Type Panel Boards and Switches.

Bulletin No. 30. Fan Hanger Outlets and Floor Boxes. All of the catalogs will be gladly sent upon request.

Valuable Catalog of Fire Exit Latches. The Vonnegut Hardware Company has just published a new complete catalog illustrating and describing the five types of Von Duprin self-releasing fire-exit latches. The catalog is a complete technical manual and shows all of the modifications to which the five types of fire-exit latches can be subjected to meet every conceivable situation in schools, auditoriums, theaters, factories and other buildings where large numbers of people congregate and where safety of exit is an important factor. The catalog should be in the hands of every school board secretary and building superintendent.

A few pages of the catalog are devoted to special locks and latches, threshold strikes, hinges, door holders and other devices.

Copies of the catalog will be sent to any school authority or architect upon request.

Issue New Catalog. The American Portable House Company of Seattle, Washington, has just issued the 1924 edition of its catalog of portable schoolhouses. The catalog is published with the very significant slogan "American built schools provide a place for every child." The catalog makes clear that American Portable Schoolhouses are not temporary make-shifts, but are practical, durable, efficient, portable school units, which are useful and convenient as well as entirely sanitary. The catalog lists all the various types of one-room and multi-room houses including a new type of gymnasium which will serve as an auditorium and gymnasium for a group of portables. The catalog which is fully illustrated will be sent on request to any school authority.

Steel Windows for Schools. The manufacturers of steel window sash have contributed more to improved lighting and ventilation of schoolrooms than most architects and school hygienists are willing to admit. It is readily demonstrable that the steel sash permits of twenty to thirty per cent greater glass area within a given wall opening than is possible with wood window frames, mullions, and sash. It is similarly easy to show that the ventilating qualities of the old style of sash are improved by 25 per cent so far as the direction and amount of air admitted are concerned. These improvements have not come as the result of demands made by school authorities, hygienists, or architects, but have been developments which the manufacturers and their inventors have originated and have "sold" to the schools. We say "sold" because in a majority of cases it has required great persuasive power and intelligent salesmanship to convince building committees and architects of the actual lighting and ventilating qualities of steel sash and of the efficiency and ultimate economy to be effected.

A strong bit of evidence of the forward looking interest which manufacturers of steel window sash have in improved schoolhouse design is a new catalog just isued by the Detroit Steel Products Co., Detroit, Michigan. This booklet discusses the hygiene, lighting, ventilating, and fire protection advantages of steel window sash as applied to schools and provides complete technical information on four distinct types of windows. The windows and window details are completely illustrated and typical combinations are given. Copies of the catalog are available for school authorities, architects, and draftsmen.

Sectionfold and Rolling Partitions. The enormous increase in building costs which has accompanied and followed the war has practically eliminated the old-style Boston Cloakroom from elementary schools. The change has been entirely for the better, because it has caused the introduction of the sanitary wardrobe which is at once economical of space, an aid in maintaining discipline, an effective means of ventilation, and a help in avoiding infection, etc. The advantages of the sanitary school wardrobe are fully illustrated and described in the new catalog No. 37 of the J. G. Wilson Corporation, 11 East 36th St., New York. The pamphlet contains complete details of construction for the use of architects and school authorities and shows typical installations.

An important section of the catalog is devoted to Sectionfold and rolling partitions which have become a distinct and valuable adjunct to high and elementary schools where auditoriums and gymnasiums must be divided into smaller rooms for instruction purposes. Copies of catalog No. 37 will be sent upon request to any interested person.

BUYERS NEWS.

Gluey Paste. The Commercial Paste Company of Columbus, Ohio, has recently reported the wide acceptance for school use of Gluey Paste, an adhesive which is peculiarly well adapted for use by children. Gluey Paste is compounded from oriental gums and has been particularly manufactured to meet some of the peculiar conditions which are found in schools. Teachers and supervisors of art and of primary construction rarely have time to compound pastes or to give much time to putting them into proper condition. School pastes must remain usable for weeks at a time without attention, and must at the same time be of a quick drying type. Teachers who have used Gluey testify to these qualities of the adhesive.

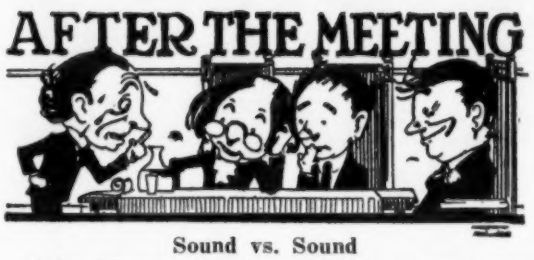
Contract Let for Ventilating Equipment in New Buffalo High School. Contract for the ventilating equipment, consisting of fans and air washers, in the new Lewis J. Bennett High School of Buffalo, N. Y., has been awarded to the Buffalo Forge Co., of the same city. This school will be fireproof, four stories, of brick and concrete and will be approximately 320 feet by 240 feet. The estimated cost is $2,700,000.

The contract calls for the installation of four main supply fans and four main exhaust fans of the Buffalo Conoidal type, eight disc fans of various sizes for toilet and laboratory exhaust purposes, and two special air washers of the Carrier Type "A" construction. The air washer pumps will be of the Buffalo Steam Pump Company manufacture.

The building is designed by the Buffalo Associated Architects in consultation with the Wm. B. Ittner Co., of St. Louis. The heating and ventilating contractor is the Power Efficiency Co., of Buffalo, N. Y.

Open Office. The Landis Engineering & Mfg. Co., of Waynesboro, Pennsylvania, has just established a sales and service branch office at 433 Board of Trade Building, Indianapolis, Ind. The office will be in charge of factory trained men who will be able to render all engineering installations and service work, and will give the trade the very best and quickest service on all work which may develop.

To Sell Jacobus Inkwells. The Jacobus Pneumatic Inkwell Co., has announced that arrangements have been concluded with G. Ratner & Co., 225 5th Ave., New York, whereby the latter firm will undertake the distribution of the well known Jacobus inkwell in the eastern territory. School authorities in New York, New Jersey, Pennsylvania, who desire inkwell service may be assured of careful attention from G. Ratner & Co.



Sound vs. Sound

A hard headed member of a school board was induced by the principal of the local high school to attend a lecture delivered by a famous artist. The school board member was afterwards introduced to the artist.

"And what did you think of my lecture?" asked the artist.

"Sound—Sound," said the critic.

"Ah, and what else?" asked the flattered lecturer.

"Nothing but sound," said the school board member.

Easy for Her

Teacher: Please name the presidents up to date.

Pupil: I can't remember them all.

Teacher: But I could when I was 16 years old.

Pupil: Yes, but there were less then.

Mathematically Speaking

Mrs. Newly Rich was showing off her son, home on sick leave from a public school, to a bosom friend.

"Alfie's learning lots o' languages," she said. "Latin and Greek and French and Algebra and what-not!

"Alfie, say 'I 'ope you're well' to the lady in Algebra!"

History Still Repeating

"Willie," asked the teacher, "what was it Sir Walter Raleigh said when he placed his cloak on the muddy road for the beautiful queen to walk over?"

Willie, the ultra-modern, gazed about the classroom in dismay, and then, taking a long chance, replied:

"Step on it, kid!"

As It Were

High Principal: The janitor started a roaring argument, so I got the board to fire him.

Friend: I see—canned heat.

The Infant Lizst

Passionate Seeker after Musical Knowledge: What was the first symphony, professor?

Music Teacher (just blessed with triplets): Walk past my house after school and you'll hear it!

L'Etat c'Est Moi

Political Science Student: Do you suppose, Professor, that even Tammany thinks it's working for the good of the country?

Himself: Probably, only it thinks this is the land of the free and the home of the Braves.

Economic Information

A teacher in one of the lower grammar-school grades was telling her class the story of how our money is made. Holding up a two dollar bill, she dwelt at length on the many things which were engraved upon its crisp surface.

"What does this '2B' stand for?" she asked Jimmy, who had been an attentive listener.

"Two bucks," was the ready reply.—Harpers.

Cause for Admiration

"How did you get on with spelling?" Harry's mother asked him, after his first day at school. "You look so pleased that I'm sure you did well."

"No, I couldn't spell much of anything," admitted Harry, "and I couldn't remember the arithmetic very well, nor the geography."

The mother showed her disappointment, but Harry had consolation in reserve.

"But that's no matter, mother," he said; "the boys admire me; they say I've got the biggest feet in the class."—Chicago News.

Answering from Observation

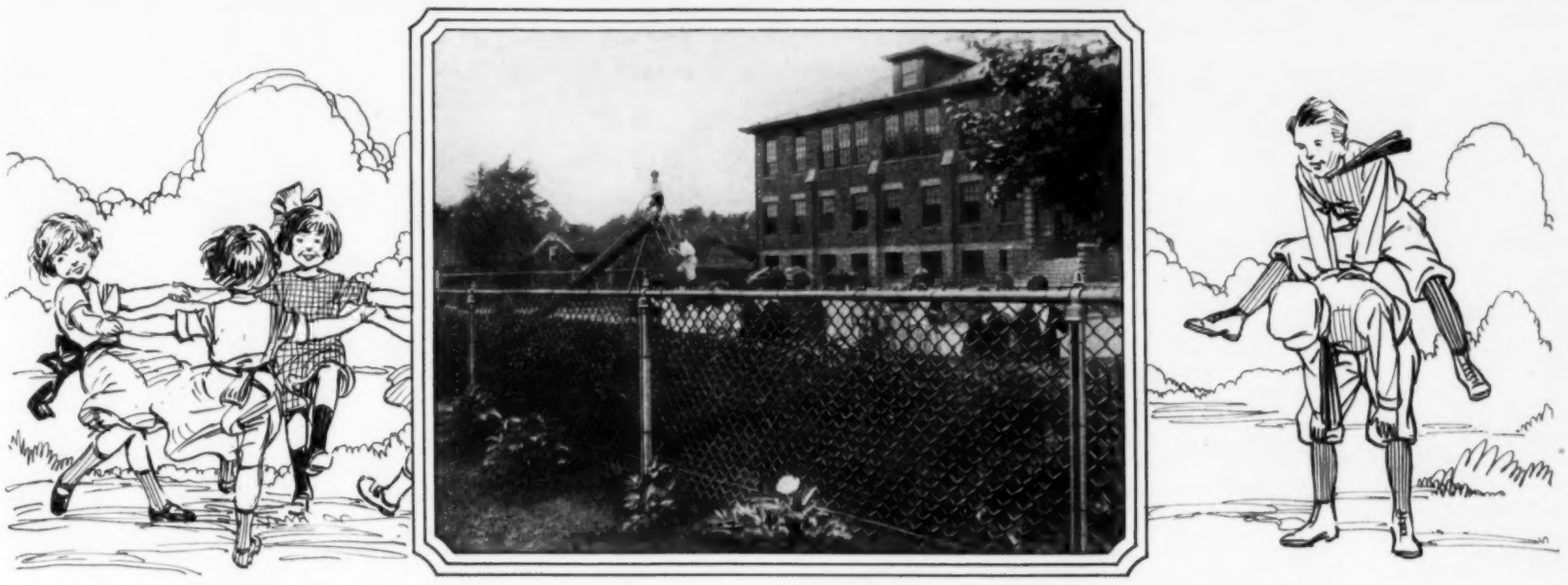
Teacher—"How is the earth divided?"

Johnny—"One-fourth land and three-fourths water, except the Ohio River, which is half and half."—New York Sun.

Good Advice

A lecturer in one of the evening schools in a western city, held forth prosily on his abstract subject for an hour, amid the yawns of a tired, uninterested audience. Finally, in one of his oratorical pauses, he said: "And now I stop my main argument to ask myself a question."

"Don't do it," piped a voice from the rear, "you won't get a sensible answer anyhow."



Make Play-time a *Safe-time for* Children

Schoolyard; Outdoor School, Hartford, Conn., adequately protected by an Anchor Post Chain Link Fence.

Safe from traffic dangers. Municipal Playground at Bayside Park, Jersey City, N. J.

Anchor-Weld Railing and Gate, surrounding the Hartford High School, Hartford, Conn.

HAPPY, carefree schooldays:— those glorious days of boyhood and girlhood. Wonderful memories! Who would give them up?

And yet, this very hour, for many little maimed bodies, happy schooldays are no more. Today, here and there, perhaps in your city or town, some little boy or girl will laugh and frolic for the last time.

Speeding automobiles!

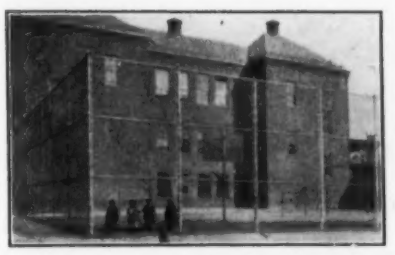
To help *Make Play-time a Safe-time for Children* is an enjoyable but very important and serious part of our business. Throughout the country, at schools and playgrounds, Anchor Post Fences are unfailingly protecting thousands of youngsters against ever-present traffic dangers.

If your schoolyards or playgrounds are still unprotected—you will want to talk it over with the nearest Anchor Post Protection Specialist. Just phone, write or wire for him.

ANCHOR POST IRON WORKS

52 Church Street. New York, N. Y.

BALTIMORE, MD. 509 W. Franklin St.
BOSTON, MASS. 79 Milk St.
CHICAGO, ILLINOIS 8 So. Dearborn St.
CINCINNATI, OHIO 141 East Fourth St.
EUCLID, OHIO 21500 St. Claire Ave.
DETROIT, MICH. Penobscot Bldg.
HARTFORD, CONN. 902 Main St.
MINEOLA, L. I., N. Y. 167 Jericho Turnpike
WILKES-BARRE, PA. 300 Coal Exchange Bldg.
PHILADELPHIA, PA. Real Estate Trust Bldg.
PITTSBURGH, PA. 541 Wood St.
ROCHESTER, N. Y. 48 Berry St.
ST. LOUIS, MO. 604 La Salle Bldg.



South Street School, Newark, N. J. An installation of Anchor Post Chain Link Fence, 18′ high.

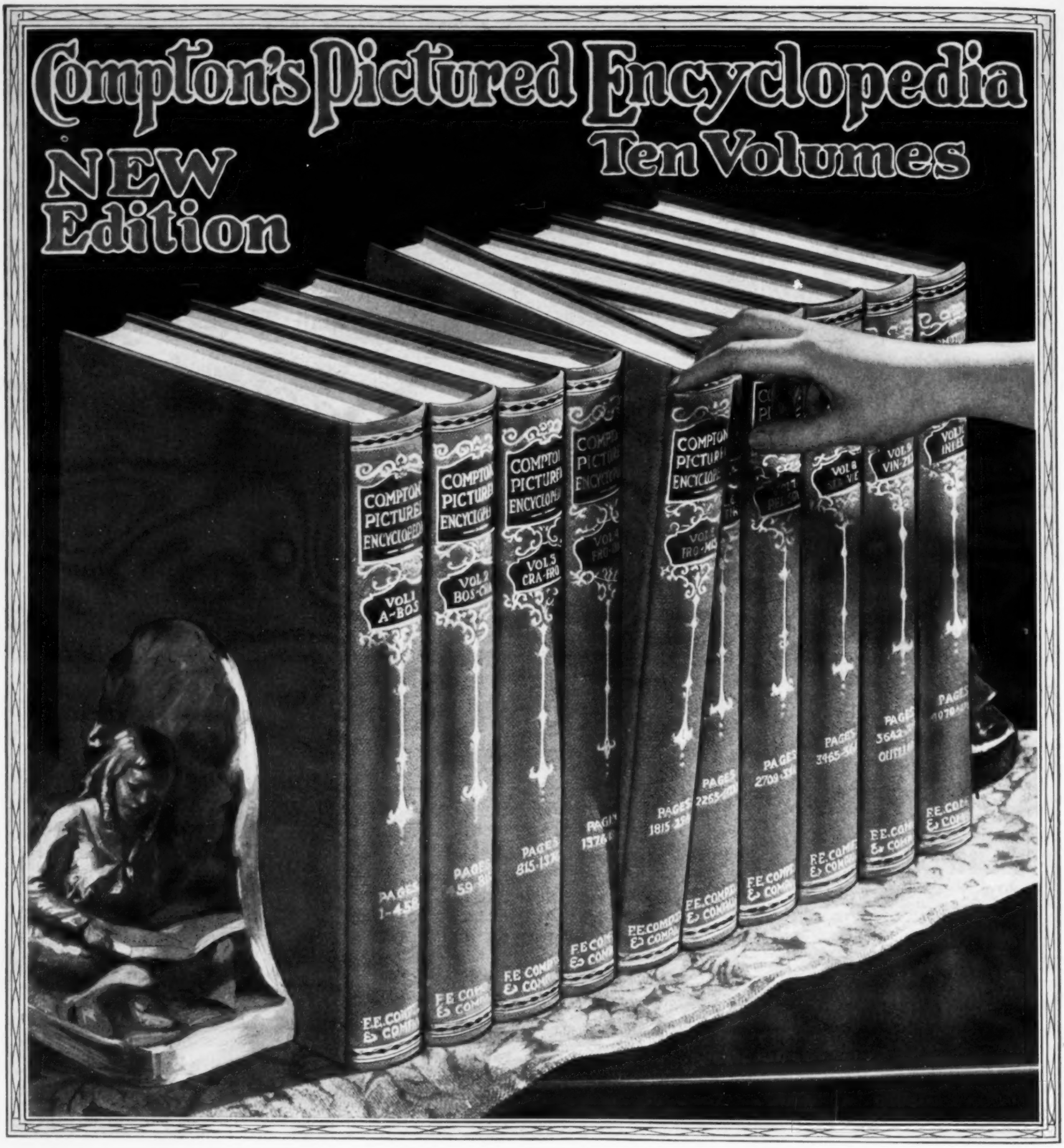
Anchor Post Chain Link Fence at public school, Purchase, New York.

Columbian Playground, East Orange, N. J. Here, an Anchor-Weld Railing and Gate provide unfailing protection.

Anchor Post Fences

FIRM - *because Anchored* PERMANENT - *because Galvanized*

2534-G



Compton's Pictured Encyclopedia is a revelation in encyclopedia making. It is the product of the most advanced educational thought in America. It has been prepared by educators who are recognized as pioneers in modern methods of instruction and who are today recognized leaders in educational progress.

Five years and over $450,000 were spent to prepare Compton's Pictured Encyclopedia in such form that it not only satisfies the teacher's constant demand for material, but also kindles and fosters intellectual curiosity in the young.

Already thousands of schools throughout the country have the advantage that this wonderful 20th Century help brings. Others are purchasing as rapidly as funds permit.

If you have not made an investigation of this most modern encyclopedia, write for sample pages and prices.

F. E. COMPTON & COMPANY., 58 E. Washington Street, CHICAGO

CORRIDOR FLOORS

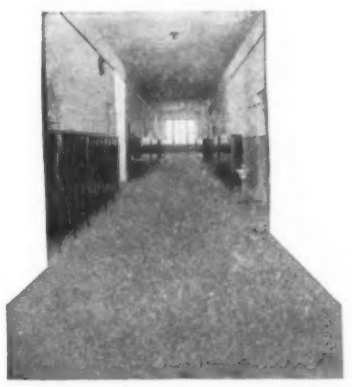
IDEAL corridor floors are those of **Marbleloid Permanent Flooring.** First of all they are attractive and substantial in appearance. They are f i r e p r o o f, warm, and they are installed to wear as long as the building stands.

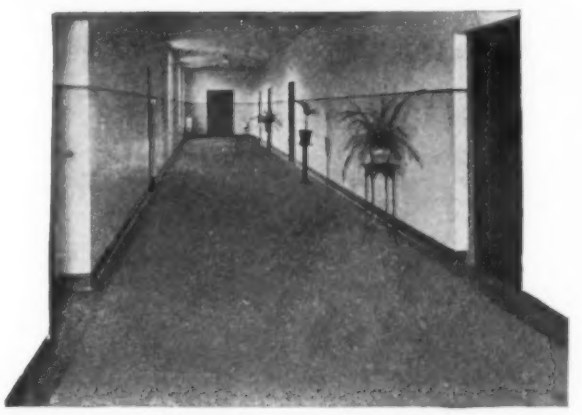
A Marbleloid corridor floor in a school building will minimize the sound of footfalls. It will offer a sure foothold. It will be resilient. It will not "dust" or "chip" or require expensive upkeep. It will be sanitary and quickly cleaned.

If all the corridor floors of Marbleloid Flooring could be laid end to end they would form an ideal walk of many miles in length. You will find them now in many Schools, Colleges and other educational buildings.

The Marbleloid Floor Adds to the Richness of This Corridor.

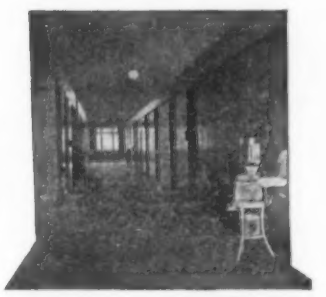
Indeed this Corridor floor will withstand the wear of a great many years. It is of Marbleloid.





The cheerfulness of this Corridor is enhanced by its Marbleloid floor with continuous baseboard in different color.

Serviceability is a paramount requirement of this Marbleloid Corridor floor.



Write for illustrated bulletin about use of Marbleloid in School Buildings.

THE MARBLELOID COMPANY, 465 Eighth Ave., New York, N. Y.

USE THIS COUPON

THE MARBLELOID COMPANY, New York City

Without obligating myself in any way please submit tentative estimates on the cost of your product installed complete for our building.....; below are the approximate areas involved.

Floor.....Sq. Ft. Sanitary Base.....Lineal Ft. Wainscot.....Sq. Ft.

I have checked below the floor troubles we now have.

Our floors are

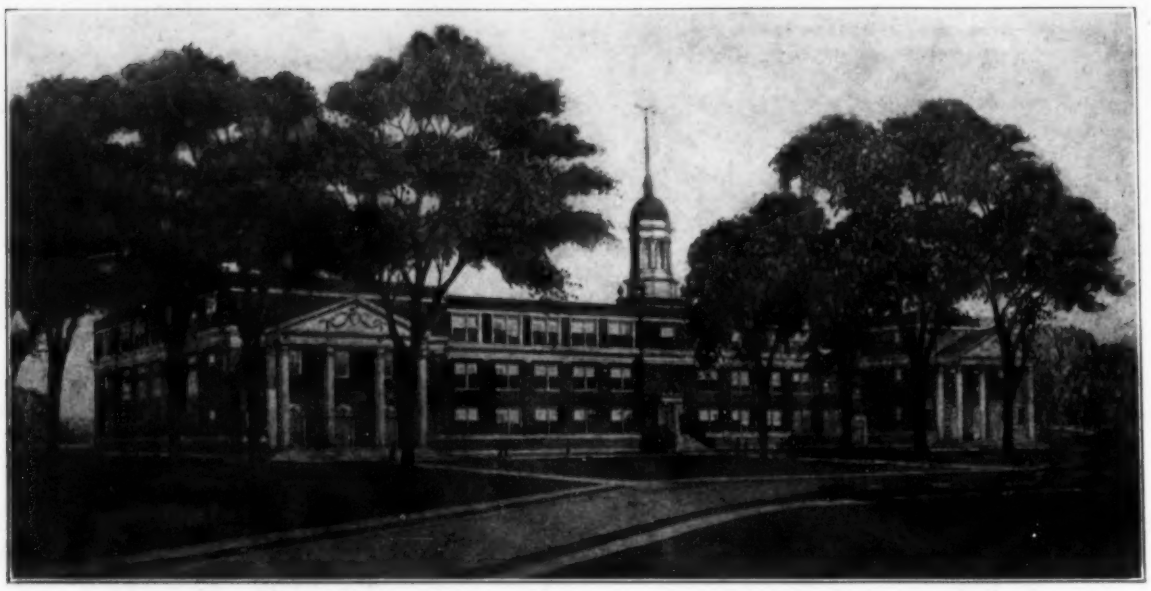
☐ New Concrete	☐ Cracking	☐ Cold	☐ Slippery
☐ Cement Finish	☐ Dusting	☐ Splintering	☐ Unsanitary
☐ Wood	☐ Noisy	☐ Rough	☐ Rotting

Name.....

Firm.....

Address.....

☐ Please send Illustrated Bulletin on School Floors.



High School, Port Jervis, N. Y. Tooker & Marsh, Architects.
A school of unusual architectural beauty, yet economically and efficiently planned and equipped.
Austral Windows throughout.

THE community looks to you, not only because it entrusts you with the precious welfare of its children, but also because educators are leaders of progress, spokesmen for enlightened methods."

Monuments To Architecture
Or
Monuments To Efficiency

ARCHITECTS do not design and build schools as monuments to their pride, as monuments to architecture alone, but rather as monuments to efficiency, learning and health.

This is necessary.

Everywhere there is an awakened realization that efficiency and health in school construction can go hand in hand with architectural beauty.

There are a host of architects who accomplish this result. Almost to a man they specify Austral Windows.

Experience in thousands of schools have taught them of their efficiency, their economy and their adaptability to architectural treatment.

You too will find in Austral Windows everything that both your pride and your pocketbook could ask for.

Our catalog describes why, in detail.

Send for a copy.